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### *Original Articles*

#### SPASMOPHILIC CONVULSIONS IN INFANCY: THEIR DIFFERENTIATION AND TREATMENT.

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There is perhaps no condition affecting the infant which is so alarming to the parents and frequently to the physician as is convulsions. In spite of this fact in the practice of medicine the serious nature of convulsions has largely been lost sight of. Most physicians find themselves well comforted with the idea that the vast majority of these cases recover, either because of or in spite of treatment. Such a view is certainly not a safe one to hold, and the conditions underlying convulsions are frequently very grave and need most intelligent differentiation and treatment. It is for this reason that I wish to present to you some ideas on that commonest of all forms of convulsions—spasmophilia.

The term spasmophilia is a broad one, and one not much used in American nomenclature. In this instance it is impossible to choose a common English term to cover a most common condition, and for this reason I have chosen the one used by the German pediatricians.

The spasmophilic convulsion has several most interesting characteristics which make it as a rule, easy to differentiate from other forms. The convulsions themselves are nearly always general in type, though it is not at all uncommon to find convulsions affecting only half the body or perhaps starting out very much in the manner of those of a Jacksonian epilepsy, one extremity being affected and the condition gradually extending over the whole body. The convulsions usually begin as clonic spasms, passing in a very short time into a tonic state and then to a short period of relaxation with unconsciousness. The child for a short time thereafter

remains somewhat dazed, but soon regains its normal mental state, and remains in this condition until the beginning of the next convulsion. Very characteristic of convulsions of the spasmophilic type is that they are frequently repeated within a short interval of time. It is not usual to have convulsions of this type occur singly. More often four or five will occur in the course of the first eight or ten hours, and I have seen as many as seventy in twenty-four hours. The condition is often preceded by more or less laryngeal stridor, which is evidenced by a peculiar crow. This type of convulsion, like other types of convulsion, should be regarded as a symptom, and not a disease. It is a part of a general tendency to spasmodic contractions which frequently are localized in character, as for instance, laryngismus stridulus, tetany, rotary head spasm, and so forth. These conditions not infrequently are present at the time the convulsions occur, and together with spasmophilic convulsions are characterized by an increased electrical irritability. The test for the electrical irritability is made with a galvanic current, the usual technic being as follows: The anode well saturated with normal salt solution is placed over the abdomen, and the cathode over the median nerve just above the inside of the elbow joint. Make and break contractions are recorded and the amount of the current necessary to produce them is read off on the milliamperimeter. It should require under normal conditions more than five milliamperes of current to produce a break contraction. The slightest twitching of the index finger is sufficient. By means of this reaction one is not only able to detect whether a state of spasmophilia exists, but may even very carefully gauge the progress of the case under treatment. In order to apply this test, one must be very careful that the galvanic current is in no way interrupted. In other words, that there is no element of faradic current present.

Spasmophilic convulsions have to be differentiated from at least five forms of convulsions

which occur in infancy. The first of these—*terminal* convulsions—which are found quite frequently just before death in marantic infants offer very little trouble and as a consequence will only be mentioned.

The *symptomatic* type of convulsions which occurs so frequently in acute febrile conditions in infancy is very hard indeed to differentiate unless one is able to apply the electrical reaction test. As a rule, however, these convulsions occur only at the onset of an acute febrile attack and are rarely repeated more than once. In this they differ materially from most cases of spasmophilia. The distinction, however, is not sufficient so that one may arrive at a definite conclusion in a given case.

*Uremic* convulsions are practically unknown in infancy, except in the acute nephritis following scarlet fever. This is not common at this age, and the disease which precedes these convulsions gives a clew as to their origin. Examination of the urine will in most cases remove all doubt. It is possible, however, to have spasmophilia combined with this condition, in which case one may be at a loss to determine which of the two conditions is to be regarded as causative.

*Meningitis*, especially of the acute variety, and intracranial tumors, idiocy with or without brain defect, hydrocephalus, and in fact, in most cases where intracranial pathology is present, convulsions are of frequent occurrence. They are rarely, however, of the spasmophilic type and practically are never accompanied by an increased electrical irritability. In the newborn we not infrequently meet with convulsions in cases of intracranial hemorrhage, but since spasmophilia rarely or never occurs at this age, it is very easy to rule it out.

There has been for some time much controversy as to the relation of spasmophilia to epilepsy. This has been due probably to two causes. First: It is not at all unlikely that the seizures of convulsions of the spasmophilic type may be at times accompanied by intracranial hemorrhage from which epileptic seizures may develop. It is more likely, however, that in the history of epilepsy we have not gone sufficiently into detail as to the character of the convulsions and have assumed that any convulsions in infancy which preceded an epilepsy of later life were essentially of an etiologic significance. There are two possibilities here. One is that a spasmophilia in early life is not in any way connected etiologically with a later developing epilepsy. The second is that the

convulsions in early life were essentially epileptic in nature and not spasmophilic. There are certain things which are characteristic of epilepsy in infancy and childhood which may be of value in determining the nature of a given convulsion. In the first place, it should be stated that no convulsions in infancy are of significance because of the distribution of the convulsive seizures. This is true whether they be epileptic, symptomatic, or spasmophilic. Characteristic of the epileptic convulsion is that it rarely begins earlier than the first year, that nearly always it is single, and that the interval between convulsions tends to become less as the child increases in age. In the spasmophilic type of convulsions nearly all occur early in life, by far the greatest majority within the first two years, and they are very common in the first year of life. The interval between convulsions is not at all regular, nor does it show any tendency to occur at certain times, except that it is materially influenced by the time of year, occurring most frequently in the late winter or early spring. The increased electrical irritability is not a symptom of epileptic, as it is of spasmophilic convulsions. You will see by this that I take the stand that the two conditions are to be differentiated, and that except in rare instances of which we have very little proof, the spasmophilic and epileptic convulsions are distinct clinical entities, and should be recognized and treated as such.

Before taking up the question of treatment of this type of convulsion, it would be well to clear up to some extent the question of its etiology. This condition has so frequently been encountered during the existence of gastro-intestinal disturbances, such as diarrhea and constipation that by many even yet the ordinary convulsions in infancy are regarded as a symptom of gastro-intestinal disturbance. While gastro-intestinal disturbance may play a large part as the immediate cause of the convulsive attack, they are probably only in a small degree to blame for the underlying condition which makes convulsions possible. Many of these children live in poor hygienic surroundings, and perhaps a larger proportion show more or less respiratory obstruction, especially adenoids and large tonsils. In nearly every instance rickets in a greater or less degree is present, and there seems to be some distinct underlying cause of the two conditions. The state of spasmophilia has in the main been attributed to one or both of two disturbances: First, the claim that the condition is due to a lesion of the parathyroid

gland. That this is not true in all cases has been proven by the fact that in many cases dying of spasms distinctly spasmophilic in type, there have been found no lesions whatever in the parathyroid glands. That the condition of the parathyroids may be chemically and not anatomically deranged is a possibility. It has been shown beyond question that in cases of spasmophilia there is a decreased calcium content of the brain. That there is a distinct connection between the disturbance of the parathyroid secretion and calcium metabolism has been definitely determined. The removal of parathyroids is followed by distinct increase of calcium excretion. Between the disturbance of calcium metabolism and rickets on the one hand and spasmophilia on the other, there is evidently some very intimate connection. It would seem reasonable to think that there is also an intimate relation between these two conditions and poor hygienic surroundings and respiratory defects when we learn that these latter are accompanied by a decreased oxygen intake and carbon dioxide excretion from the lungs, and that an excess of carbon dioxide in the blood gives us a fluid which will dissolve more calcium than will the normal blood serum. With this brief review of the etiology underlying this type of convulsion we may turn to the treatment with a better idea of what will specifically influence this condition.

Except in hospital practice it is not frequent that one can reach a child before the termination of the convulsive seizure. While the attendants of the infant feel it necessary to do something at once, it is altogether likely that in most instances any treatment during the convulsions will be of no avail. In fact, I know of but one condition where treatment during the convulsions may be efficacious. In the apneic convulsion with severe tonic contraction of the diaphragm, it is sometimes possible to stimulate respiration during this tonic spasm by dipping the child from hot to cold water and back. This repeated over a long period has seemed to me in a few cases to be effective. It is possible, however, that I have exaggerated the importance of this procedure. The efforts during the convulsive seizure should be directed only towards keeping the child from injuring itself. As a rule, this is not a difficult thing to accomplish. Immediately following the convulsion, especially if there are indications of a repetition, it is necessary to apply sedatives. The sedative to be chosen will depend a great deal upon the frequency and severity of the

convulsions. In the most severe forms early in the treatment it may be necessary to use chloroform. This should be supplemented immediately however, with a small dose of morphine, 1/50-1/100 grain, hypodermatically, and this in turn should be followed almost immediately by the introduction rectally of two to five grains of chloral hydrate in one to two ounces of water. This may be done very readily with a one-piece rubber ear syringe with the capacity of one ounce. The buttocks should be held together a few minutes after the injection to insure retention of the fluid. In most instances it is necessary to repeat the chloral hydrate at intervals of four hours the first twenty-four to forty-eight hours, gradually increasing the interval between doses until the chloral hydrate is left out altogether. The dose of chloral hydrate which I would advise is one to two grains.

These measures having been used to control the convulsion, it is wise to treat them in such a manner that sedatives can be dispensed with. For this purpose calcium would seem to be indicated if we may look to the solution of the problem from etiology. Calcium lactate, 10 to 15 grains every two hours is well borne by these infants, and will produce very effective results, as may be tested by means of the electrical irritability. One may use also subcutaneously 4-10 cc. of 8 per cent. solution of anhydrous magnesium sulphate. This latter may be repeated each day for two or three days. The use of calcium lactate in such quantities is justified by its specific effect, and it is quite remarkable how quickly the electrical irritability may be reduced to normal in many cases.

Next to the specific treatment comes the dietetic. It has long been known that a pure carbohydrate diet, provided it produces no gastro-intestinal disturbance, is of benefit in cases of spasmophilia, but of course it is impossible to keep a child for any length of time upon a pure carbohydrate diet. Sometime since, I was able to demonstrate that the whey of milk was the irritating portion, and that removal of the whey from the milk was of distinct advantage in feeding these infants. Since my first experience with this dietetic measure, I have had many cases to confirm its usefulness. It must not be thought, however, that a child can be indefinitely kept upon a carbohydrate mixture, to which has been added the curds of milk. The whey must be added gradually in the course of three or four days, and the child is then given a whole milk formula. Cod liver oil and phosphorus act in this condition in much the same



way as they do in rickets, by increasing the calcium retention and hence reducing the spasmophilic tendency. A good mixture to be used is .01 gram of phosphorus to 100 cc. of cod liver oil. This should be given in doses of one-half to one teaspoonful three times a day, and continued over weeks and months. One should be careful in giving cod liver oil that the quantity given be reckoned with in estimating the total amount of food. If this is not done one is very likely to produce a dyspepsia from the over-feeding.

Aside from the measures mentioned, there is very little of a medicinal nature to be done for these cases. Perhaps an initial cathartic may be of value. In my hands, such drugs as the bromides and like mild sedatives have been absolutely useless, and I would strongly advise that no time be lost with such procedures. One should not forget that poor hygienic surroundings constitute one of the etiologic factors of this condition, and fresh air and cleanliness are of great value in the treatment of these convulsions. As a preventive measure, one might also mention the removal of all obstructions to respiration.

In treatment of spasmophilia there are certain pit-falls to be avoided. One is to remember that any slight stimulus to the child such as sudden chill, sudden sharp noise, and so forth, may be an immediate cause of convulsive seizure. Even bright light is to be avoided. A peculiar condition, which so far as I know has not been previously mentioned, but which was brought rather forcibly to my notice not long ago is the fact that alkalies increase the electrical irritability, and hence the tendency to convulsions. This is of importance, especially in two conditions. In the first place, we have recently seen that in many cases of acute infection of the naso-pharynx, alkalies are of distinct advantage. The other condition is pyelocystitis so frequently found in young infants and which perhaps is best treated, at least in its initial stages, by means of alkaline therapy. The frequency of slight degrees of acidosis in infants renders it advisable in many instances to give alkaline water and various powders containing sodium and potassium compounds. Such therapy should be carefully guarded against in cases of a spasmophilic nature.

#### CONCLUSIONS.

1. Spasmophilic convulsions constitute a distinct type of convulsions, and should be care-

fully differentiated from other forms of convulsions occurring in infants.

2. There is no evidence at hand which goes to show that the epileptic convulsion is or can be derived from a spasmophilia which produces no pathologic lesions in the brain.

3. The initial treatment of convulsions consists in the use of sedatives.

4. Specific treatment consists in the use of calcium and magnesium compounds which are very effective in reducing the electrical irritability.

5. The regulation of the diet is of distinct advantage. In the early stages one may use a pure carbohydrate food. Within twenty-four to forty-eight hours the curd of whole milk should be added to this, and within a very short time the whey is gradually increased. Cod liver oil may be given in the amount of one-half to one teaspoonful three times a day continued over many weeks and months.

6. One should avoid the use of alkalies in treating another condition which may perchance be present at the time of the convulsive seizures.

#### DISCUSSION.

DR. H. M. RICH OF DETROIT: Dr. Grulee has a very practical paper and there is hardly any condition in the diseases of infancy that arouse the parents of your small patients to a pitch of greater anxiety in watching it than convulsions, especially if they be repeated. If one is managing this sort of a case, it certainly is very important to be able to recognize the condition which the Germans have called the "spasm diathesis." The term explains itself and has been very completely and thoroughly illustrated by Dr. Grulee. It means, in effect, that here is a child in such a condition that stimuli of various characters, gastroenteric stimuli, which ordinarily would not affect the child, will give the child convulsions or convulsive movements of various kinds. I would add to the classification, which Dr. Grulee mentioned, also the condition of physical spasm. I remember a case in which there were both laryngismus stridulus and physical spasm. We may have the complete range of convulsive movements. Dr. Grulee mentioned having seen seventy in twenty-four hours. I sometimes exchange stories with him in the city, and I want to say now that we had one in Detroit that had one hundred and forty-four.

One other condition of convulsion which was not mentioned, but which would perhaps come under one's classification, is the very severe and prolonged convulsion which often accompanies the onset of tuberculous meningitis. That is a condition in which you should be very careful not to promise recovery. It is quite characteristic of the onset of tuberculous meningitis to have convulsions lasting several hours and extremely severe in character. I can certify to the correctness of the frequency with which adenoids and rickets accompany these conditions. I would say, however, that this is by no



means confined to children in poor circumstances; it occurs on the best streets and in some of the good houses, although it is, of course, much more common among the clinic patients who come from the poorer districts.

DR. C. W. HITCHCOCK, OF DETROIT: Far be from me to assume to attempt to illuminate the dark fields of epilepsy or pretend to know just what epilepsy is, but it does not seem to me the essayist has conclusively differentiated between epilepsy and spasmophilic convulsions. Those patients that come to the neurologist later on with that symptom complex that we speak of as epilepsy so very often give us the significant history of early and frequent convulsions in childhood as to make me skeptical as to whether the later epileptic, the later spasmophilia, does not sustain a certain relation to the earlier spasmophilia, because the epileptic is only later on a spasmophilic. It seems to me that for men who see much of children, it is a most exceedingly important paper. When called to a case of convulsions one should always try to determine at once whether they have to deal with an organic or a functional lesion. There are several little earmarks that help us to make up our minds. In the first place, spasmophilic convulsions are very uncommon after the third or fourth month. The other cases very rarely occur in the first three or four months of life, they almost always occur before the end of the second or the second and one-half year, so that if we have a case of convulsion or tetany in a child in the first three or four months of life we may conclude with some degree of safety that we have a case of spasmophilia, but if the child is in its second or second and one-half year we may conclude with some degree of accuracy that we have not a case of spasmophilia but a case of organic disease. That is one point.

In the next place, they occur very much more frequently in the winter time than in the summer time, as mentioned by Dr. Grulee. That is another point.

In the third place, it is true that almost always in spasmophilia, in any of its latent manifestations, we find rickets or some indication of rickets. As Dr. Grulee said, they almost always occur together. We do not know just what the relationship may be between them.

In the fourth place, and what is more important than anything else, electric excitability is increased. Von Pirquet and a good many others say that over 50 per cent. are breast fed babies of those that have spasmophilia. Now, if we tested at regular intervals our breast fed babies with the electrical reaction, we might do a great deal of good and prevent a whole lot of neurotic trouble later on, because there is hardly any other way of estimating in a physical way the degree of disease present in the body in any condition I know of that compares with, is so scientifically correct as the estimation of the degree of spasmophilia in a baby by simply taking its electrical reaction. If you get a reaction under five amperes it is spasmophilia usually; if it takes more than that, the baby has not spasmophilia. So that, when we get a case of spasm in a baby, if it is a bottle fed baby, if it reacts with a current of two or three amperes, if it is in the winter, it may be a well-to-do baby or a poor baby, we generally have a case of spasmophilia.

DR. V. A. CHAPMAN, OF MUSKEGON: I would like to ask if calcium lactate in such doses does not cause gastrointestinal disturbance. Also, I would like to ask Dr. Grulee about one of the diagnostic points, if a light tapping of the masseter muscle causes spasms.

DR. CLIFFORD G. GRULEE, CHICAGO: In reference to Dr. Rich's discussion, his fish story is a little bit bigger than mine. (Laughter.)

As to Dr. Hitchcock's remarks in regard to the differentiation of spasmophilia from epilepsy, Birk, some eight or nine years ago, followed up from fifty to sixty cases in the Breslau clinic which had during infancy shown increased electrical irritability. In no case was there any epilepsy or special nervous phenomena to be noticed as a result of the spasmophilic tendency. It seems to me that epilepsy may begin in infancy the same as spasmophilia, but, as I tried to show, and evidently did not, there is a distinct difference between the convulsions of epilepsy and those of spasmophilia. The convulsions of spasmophilia show increased electrical irritability, have the laryngismus stridulus and other signs. Epilepsy comes at irregular but decreasing intervals. There is usually one rarely before the sixth month, then every two or three months, then every month and so on, the interval between epileptic convulsions being decreased, naturally. There is in the epileptic convulsion that I have seen no increased electrical irritability. I think that probably the profession has held the idea that a convulsion was a convulsion and that a history of convulsions in infancy meant the possibility of epilepsy later on. As I mentioned in the paper, there is a distinct possibility that small hemorrhages into the brain may occur through very severe seizures of a spasmophilic nature, but I do not believe we have any evidence to show that epilepsy is not a distinct entity aside and apart from spasmophilic convulsions. If such evidence is in existence, I have never seen it, and there are many ways where the epileptic convulsion seems to differ distinctly from the spasmophilic.

I am not aware of the Von Pirquet report of 50 per cent. of his bottle fed babies having increased electrical irritability. It is extremely rare in my experience to have breast fed babies show increased electrical irritability.

Dr. Chapman asked about the giving of calcium lactate and about the cheek tapping. First, calcium lactate is not soluble in water, but it can be mixed up with a teaspoonful of water and given to the baby. It is very likely that the baby does not get the full amount of fifteen grains of calcium lactate. At the same time, I have not seen any gastro-intestinal disturbance from calcium lactate. I have given it to five or six cases. Chvostek's sign, which is elicited by tapping on the cheek with resultant twitching of the masseter muscle and perhaps the corners of the cheek or the mouth, while it is frequent in spasmophilia, is not altogether characteristic. You will get your Chvostek sign in most cases, but in many cases you will not get it and in many others, where it is present, there is no increased electrical irritability. However, the Chvostek sign is of some help, because it does frequently occur in spasmophilia.

104 S. Michigan Ave.

THE ADMISSION OF INDIGENT PATIENTS TO THE UNIVERSITY HOSPITAL, ANN ARBOR, MICHIGAN.\*

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It seems necessary to preface my remarks by a short discussion of the title of my paper as it appears on your program. As I study the various legislative acts having to do with the admission of certain patients to the University Hospital and see the practical application of these various laws and their relations to the probate judges of the State it seems to me that almost the entire question revolves upon the definition of the word "indigent." This word undoubtedly has come to have a certain legal definition. An indigent person is one who for one reason or another is so destitute, needy or poor that the township, county or state must step in and so provide for his existence that he will not perish for lack of sustenance. Such individuals then become public charges of the town, county or state and the maintenance of such persons are provided for out of the tax roll assessed by the State or the different divisions of the State. Such "indigents" are spoken of as county charges, the county poor, paupers, et cetera. Necessarily there has always gone with the various names by which these unfortunates have been designated a certain stigma. In song and in verse and in daily experience it is easily demonstrated that the average American will do almost anything rather than to become a county charge, an indigent. Dire necessity may compel him or his family to accept aid from the town, county or state but the self respecting fight against it as long as they can and are adverse to having the fact known to the community at large. Undoubtedly this is as it should be and is the underlying factor which keeps the number applying for and accepting aid within reasonable limits.

Ever since the establishment of the University Hospital those having in charge the class of indigents referred to above have availed themselves of the free medical and surgical treatment which has always been a fundamental policy of the institution. But the ways of caring for the sick and poor throughout the State are very varied and so well known to you as to make it unnecessary to elaborate further. Some county supervisors or superintendents of

the poor availed themselves of services of the experts of the staff of the University Hospital while others decided that indigents, even if they needed special medical or surgical care and treatment could be and therefore should be cared for at less expense in the county houses and infirmaries.

I beg of you not to think that I am criticising the care of the sick poor in county houses by the Michigan physicians nor am I claiming that the clinicians at the University Hospital are skilled above all others. Nor is it necessary to be connected with the State Hospital to be a skilled specialist. But the latter can not afford and, as a matter of fact, does not give his services to the indigent class who are in need of his services. Usually such patients are treated by physicians under a contract with the county, the lowest bidder securing the contract. The physicians and surgeons connected with the University Hospital, on the other hand, are paid by the State not merely to teach medical students, but for the time necessary for the care of patients in the hospital. Since they are chosen for their positions because at least they are considered experts and because their time devoted to the care of hospital patients is well paid for it would indeed be strange if the average indigent patient would not stand a better chance of cure in the University Hospital than under a contract system. At the present time any supervisor or superintendent of the poor can send patients to the University Hospital at the expense of the county, the latter guaranteeing to pay the usual hospital rates for board and maintenance. Such patients differ in no respect from other hospital patients referred by physicians except that they come under the hospital rule giving preference in assignments of beds to state patients.

But there is another class of patients whose admission to the hospital is provided for by statute in whom the probate judges are particularly interested. These patients may or may not be "indigent" as we have defined the word, that is, they may or may not be county charges. Without passing in review the various acts prior to Act 274 passed by the legislature in 1913, it will suffice to analyze this act or such portions of it as apply to the probate judges.

I beg leave to read the title of the bill although it doubtless is well known to you all:

Act No. 274 of the Public Acts of 1913.

"An act to provide for the medical and surgical treatment of children who are afflicted

\*Paper read before the Association of Probate Judges of Michigan at Cadillac, July 14, 1915.

with a curable malady or deformity and whose parents are unable to provide proper treatment, providing for the expense thereof and prescribing the jurisdiction of the probate court in such cases."

It will be noticed that the word "indigent" does not appear in the above title. Why is this except for the purpose of recognizing that there are children within the State whom the latter is in duty bound to help whose parents and guardians can not be regarded as indigents yet who are unable to provide for hospital care and treatment of such afflicted children? In other words by this act the legislature has recognized that such a class exists and provides the necessary machinery by means of which they may receive aid at the hands of the State. By means of this wise law the State provides for the hospital care and treatment of children with congenital defects like hair lip and cleft palate, and of children with deformities resulting from infantile paralysis and tuberculosis. In fact the purpose of the law is to provide the means whereby the ills of children can be ministered unto in such a manner that self respecting and self supporting adults shall result. By implication this law says that a deformed child is bound to be a burden upon the State, hence the latter is in duty bound to provide the means whereby it can be relieved of this burden in the shortest possible time.

It is essential that the full significance of this law be grasped if the greatest good is to accrue from it to the State. As far as I have been able to ascertain it is the first law of its kind in any state in the Union. In fact it has served as a model for other states and probably will be more widely copied when its far reaching benefits are seen.

In order that no advantage shall be taken of the general broad statement that the act applies to children for whom their parents or guardians are unable to provide proper care and treatment, the determination which parent is and which is not able to pay is placed in the hands of the probate judge. The law specifies that the latter shall investigate the case through the county agent or superintendent of the poor and a physician appointed by him for the purpose of such investigation. Undoubtedly the value of the law lies in the fact that, like laws relating to the commitment of the insane, the decision rests with an officer of the State who can grasp the purpose of the law and apply it without unnecessary red tape. The judge of probate must settle in his own mind from

the report of his agent whether the parents or guardians of the child are in reality able to pay for suitable hospital treatment for the afflicted child. The parents in a particular case may be far from being county charges yet they may be just as far from being able to raise the money necessary to restore their child to health. It is for the judge of probate to determine whether the interests of the State and the particular child in question are not best served through the State's expenditure of a certain sum of money in the attempt to restore the child to health. I wish I had the time to tell you what this law has done for the afflicted children of Michigan. I am at work now on a report of what has been accomplished in the cases of seven hundred children who have been admitted to the hospital during the past two years under the law referred to above. However, in the brief time at my disposal I can only assure you that the most cruelly afflicted children have been restored to health, their lives made happy and placed in a condition whereby they can become useful citizens of the State. When the report is completed I will see that each of you receives a copy but until that time I ask that you one and all come to the Hospital and see for yourselves what is being accomplished.

The seven hundred children mentioned above, all of them referred to the hospital under Act 274 during the last two years by the probate judges of the state were distributed amongst the counties as follows:

Alcona .....	2	Huron .....	5
Alger .....	1	Ingham .....	21
Allegan .....	2	Ionia .....	3
Alpena .....	3	Isabella .....	4
Antrim .....	7	Jackson .....	56
Arenac .....	2	Kalamazoo .....	16
Baraga .....	1	Kalkaska .....	5
Barry .....	4	Kent .....	23
Bay .....	10	Lake .....	2
Benzie .....	2	Lapeer .....	5
Berrien .....	19	Leelanau .....	1
Branch .....	8	Lenawee .....	2
Calhoun .....	18	Livingston .....	4
Cass .....	3	Luce .....	1
Charlevoix .....	5	Macomb .....	5
Cheboygan .....	4	Manistee .....	8
Chippewa .....	20	Marquette .....	14
Clare .....	6	Mason .....	1
Clinton .....	4	Mecosta .....	2
Crawford .....	2	Menominee .....	4
Delta .....	1	Midland .....	2
Eaton .....	5	Missaukee .....	1
Genesee .....	21	Monroe .....	2
Gladwin .....	2	Moncalm .....	23
Grand Traverse .....	7	Montmorency .....	2
Gratiot .....	3	Muskegon .....	1
Hillsdale .....	3	Newaygo .....	1
Houghton .....	6	Oakland .....	17



Ogemaw .....	1	Sanilac .....	8
Ontonagon .....	2	Schoolcraft .....	3
Osceola .....	11	Shiawassee .....	14
Oscoda .....	1	St. Joseph .....	5
Otsego .....	4	Tuscola .....	5
Ottawa .....	12	Van Buren .....	10
Roscommon .....	1	Washtenaw .....	121
Presque Isle .....	3	Wayne .....	46
Saginaw .....	10	Wexford .....	1

No patients were received from the following counties:

Dickinson, Emmet, Gogebic, Iosco, Iron, Keweenaw, Mackinac, Oceana, St. Clair.

The following will give you some idea of the maladies and diseases for which these children were treated during their stay in the hospital:

Paralyses resulting from infantile paralysis.  
Wry neck.  
Pott's disease of the spine.  
Fractures  
Dislocation of the hips.  
Tuberculosis of various joints.  
Club feet.  
Knock knees.  
Rickets.  
Tumors of the brain.  
Cerebral hemorrhage.  
Tumors of the spine.  
Cleft palate and hair lip.  
Hernias.  
Septic tonsils and adenoids.  
Tumors of the throat.  
Mastoid infection.  
Nasal troubles.  
Inflammation of the eye.  
Ulcers of the eye.  
Cross eyes.  
Syphilis.  
Skin diseases.

The latest bill relating to the admission of patients to the University Hospital was passed by the last legislature. Briefly this bill, Act No. 153, Public Acts of 1915, provides the machinery whereby the probate judges can refer adults to the hospital. The title of the bill is as follows:

"An act to provide free hospital service and medical and surgical treatment for persons afflicted with a malady or deformity which can be benefitted by hospital treatment who are unable to pay for such care and treatment and for pregnant women unable to pay for such care and treatment and for the children of such pregnant women born during the period of hospital care, and providing for the expense thereof, and prescribing the jurisdiction of the probate court in said cases."

It will be noted that here also the word "indigent" fails to appear. Hence while the indigent patient may properly come under this act, persons not generally recognized as indigent

may also come under the provisions of the act. For instance, a self supporting man with a large family suddenly develops a hernia which wholly or partially incapacitates him from work. He is not a county charge, he does not wish to be a county charge, yet he has saved nothing because of his family, and he has no money for an operation and hospital treatment. It is to the interest of the State to prevent such a man from becoming a charge on the county. A small sum expended for the proper hospital treatment will restore such a man to health and insure for the county and state a self supporting and self respecting citizen.

It is needless to explain the references to pregnant women. It seemed necessary to specifically designate this class of patients since they are not strictly speaking afflicted with a malady or deformity, yet they are in a condition which under some circumstances demands hospital care. Under this act unfortunate women without means and illegitimately pregnant can be sent to a state institution by the probate judges where they and their children can be guarded and protected. If the judge so decides it will be comparatively easy for him to preserve the secret of the unfortunate woman who, more sinned against than sinning, may be given another chance after she leaves the hospital, and best of all the children of such patients, who at least are guiltless, are watched over and guarded by the State and become one of its distinct assets.

In conclusion may I ask that you give the machinery the State has placed in your hands for the relief of certain classes of people within your jurisdiction, a fair trial. The hospital authorities stand ready at all times to co-operate with you. If things do not go right let us know and we will do our best to remedy them. We are convinced from what we have seen of the practical workings of the children's law that the new law will be productive of equally good results, if you will give it a trial. It rests with you to refer the patients, with us to cure or at least to benefit them.

#### THE TREND OF MEDICINE FIFTY YEARS AGO.\*

BURTON R. CORBUS, B.S., M.D.  
GRAND RAPIDS, MICH.

It has been said, "If we are to have a clear view of the panorama of medical history we

\*Chairman's Address, Medical Section, Fiftieth Annual Meeting, M.S.M.S., Grand Rapids, Sept. 1-2, 1915.

must necessarily stand on the shoulders of our predecessors." On this the fiftieth anniversary of the formation of the Michigan State Medical Society, it seems most fitting that I should take you back to the years immediately following the Civil War that we may become for the moment the doctor of fifty years ago.

The progress of medicine was so rapid in the years immediately preceding and following the first meeting of this Society that I can conceive of no better vantage place than to be mounted like the small boy on father's shoulders.

It shall be my endeavor to briefly sketch the trend of medical thought at this time, not to give you the views of the scientist in his laboratory, whose new discovery is to revolutionize medicine, not the views of the specially favored professor in the center of learning, but rather the views, the discussions, the problems agitating the man in the field, whose practical activities, whose trend of thought, is after all the true index of the advancement of medical science.

The dates of epochal medical discoveries are, of course, not the dates of their general application, but this was a time when early medical discoveries were coming to their fruition in the laboratories and hospitals of the Old World, and it will aid us in making our translation to the spirit of the times of fifty years ago if we refresh our memories from the chronological tables. Under the microscope, bacteria had been seen in 1687 by Leuwenhock, but the true founder of bacteriology was Louis Pasteur, who first defined a "ferment" the accepted cause of the so-called zymotic diseases as "a living form which originates from a germ," and paved the way for Lister by his discovery, in 1865, that the ageing of wine by micro-organisms could be prevented by partial heat sterilization (pasteurization). Lister came forward, August 12, 1865, with his discovery of carbolic acid as an antiseptic for wounds, a lucky experiment which revolutionized surgical practice; but Weigert was the first to stain bacteria in 1871, and the important specific organisms of typhoid, gonorrhea, malaria, tuberculosis, and cholera, the pus germs strepto and staphylococci, were all determined about 1880.

It is interesting to know that the Harvard catalog first mentioned the microscope in its edition of 1869-70, and the stethoscope in 1868-69, yet the stethoscope was used by Laennec in 1819 and Stokes had written a monograph on its use as early as 1825. Garrison in his *History of Medicine*, says that neither Keen nor Tyson

saw a hypodermic syringe or a clinical thermometer during 1862-65, the Civil War period. True, Sanctorius in 1625 had described a clinical thermometer and Currie, a Scotchman, had used it for checking his results in the treatment of typhoid by cold baths in 1800, yet Wunderlich was the one who put it on a practical basis through his article, *The Relation of Animal Heat to Disease*, published in 1868. From Sir Samuel Wilke's *Biographical Reminiscences*, I take this report on the thermometer as obtained from the 1870 records of Guy's Hospital. "At that time the instrument had not come into general use and was looked upon with curiosity. It was of great length and was shown at a medical society as a new medical discovery, but of very great importance. It became a subject of discussion as to what part of the body should be chosen for its use, and the length of time it should remain there."

The American Medical Association early accepted as one of its chief responsibilities the prevention of disease and as a necessary preliminary the investigation of the hygienic condition of the country at large. As one looks through the transactions of the Association for the years immediate to fifty years ago he finds a considerable amount in each volume devoted to reports of the health conditions in various states, and showing the importance then attached to the general or natural conditions often under the heading "Meteorology, Medical Topography, and Epidemic Disease." In the 1874 volume I find a report on the "The Influence of Drainage on Public Health in Michigan," by R. C. Kedzie, member of the State Board of Health, which at this time, by the way, was one of the five State Boards of Health in this country. In this report he calls attention to the fact that "from an early day Michigan had an unenviable notoriety as a land of swamp, the home of malarial fever of every name." In 1850 the general government donated to the state "swamp lands within its border on the condition that the state spend the proceeds arising from the sale of the same so far as may be necessary to their drainage and reclamation for cultivation and the health of the country." The state received thereby 5,689,054 acres.

In order to determine the results of drainage a questionnaire was sent to the doctors throughout the state—this was in 1874. As was to be expected, the drainage had lessened the amount of malaria. There are two questions the answers to which I find particularly interesting. First: How large a percentage of disease in

your practice is of malarial origin?—and the answers range quite uniformly, if we except Detroit, from 50 to 75 per cent. Second: Has the type of disease as a whole changed in your field?—and these men in the field find fewer intermittent fevers, a partial change to continuous or typhoid and typho-malarial diseases. Doctor Bliss of Grand Rapids, says, “not nearly so much intermitten and remittent but the malarial influence can still be recognized in a very large proportion of cases of nearly every disease which prevails in this locality.”

In this connection and in the attempt to faithfully portray the trend of medicine fifty years ago I call your attention to an article “Intermittent and Remittent Fevers,” by J. R. Black of Newark, Ohio, being the prize essay of the American Medical Association for the year 1867. It is presumable at least that a prize essay should represent the newer and more advanced thought of the time and should be scientifically tenable according to the knowledge then possessed. In the course of his paper under the heading “A Few Thoughts on Diseases in General,” he says, “They, the ancients, had evil spirits, a multitude of angry gods, sorcery, witchcraft, evil stars, eclipses, et cetera, as their fountain of woes, while we, according to authoritative texts have cold winds, electric disturbances, poisons from vegetable growth, and poisons from vegetable decay. These are the accredited sources of nine-tenths of our diseases.”

Taking up the causes of intermittent and remittent fevers, he dismisses the malarial hypothesis as a causative factor, and says, “The lack of a uniform and proportionate relation between intermittent fever and the assumed source of its supposed efficient cause, malaria, is the chief, but not the only reason for the unsettled credibility of this hypothesis.”

“Certain general conditions, go far to show that the received doctrine of a specific agent operating upon the system according to the principle of zymosis and producing fever of an intermittent or remittent type is clearly erroneous,” and again, “The continual grasping after some special extrinsic agent of evil is but a distracting waste of time \* \* \* \* The cause is not in some tangible specific entity, some deadly enemy, but in ordinary vicissitudes which our inherited and acquired predispositions are not fitted to withstand \* \* \* \* In harmony with this interpretation of nature, endemics, like autumnal fever, must have for their source some intensified local change or

conditions which interrupt the regularity and poise of the organic function as they are at present constituted \* \* \* \*”

So after bringing forward his arguments antagonistic to the malarial hypothesis, he proceeds to show that intermittent and remittent fevers are dependent upon the Diurnal Variations of Temperature. There appears to be one condition always present and precedent in the production of autumnal fevers, this, he concludes, and enforces his opinion by those of various writers, is a mean temperature of 60 to 65 degrees. It is the abruptness of the change from heat to cold, and vica versa, that is so often deteriorating to our bodily welfare. These diurnal changes impress on the organism every twenty-four hours the true physiological daguerreotype of agnal paroxysm. Upon their extent and the vital tone depends the development sooner or later of a full and complete picture. The cause attains its maximum at a special season of the year—so does the effect. The cause is periodical—so is the effect. The amount of cause varies greatly according to contiguous localities—so also does the effect.

From an exhaustive study of the tables which he has made of the diurnal oscillations at various army posts throughout the country, he concludes that the condition which determines the grade and prevalence of the remittent form of periodic fevers is observed to be the range of the mean summer heat.

It is his conclusion that “It cannot escape the attention of the most firm believer in a special entity that this theory gives a complete and luminous exposition of the phenomena which heretofore have been wrapped in the most perplexing mystery. Taken all in all the simplicity will, we fear, militate against its careful consideration by so many who love to revel in the recondite, but which in reality is of itself evidence of its harmony with every well ascertained law of nature; simple, yet grand, obvious yet full of beauty, and comprehensive of design.”

In considering this to us rather amusing view of the causes of these fevers it is well to bear in mind that at this time variations in temperature, variations in altitude, geological formation, and in general the topography of the country were supposed, in the absence of other determinable causes to be the prominent factors in the production of disease.

Fifty years ago as now the two great plagues compelled the attention of the profession. In the first printed transactions of the State Med-



ical Society is to be found a report of the surgical committee by its chairman, Doctor T. A. McGraw, of Detroit, then as now a distinguished and honored confrere. In this report he says, speaking of syphilis "first of all comes that question which is now agitating the medical world of the quality of the syphilitic virus. Surgeons who have studied the natural history of the disease have noticed that certain contagious venereal ulcers have been followed by constitutional syphilis, while others have produced only local lesions. Now the question arises, is the difference due to the existence of two different diseases or to the peculiarity of constitutions of the individual in question. A question which has a most practical bearing. For the satisfactory solution of this problem further exact clinical observation is necessary, and one authentic case which would bear criticism of the production of one of these diseases by the other would overthrow the doctrine of the duality of the virus, a doctrine whose influence on the practice of surgeons is becoming every day more manifest."

Following out this subject I turn to the address in surgery delivered before the American Medical Association at its Detroit meeting in 1874, by Doctor S. E. Gross. It is interesting to know in view of our latter day freedom of discussion in these matters that he approaches the subject "with great fear and misgiving, with doubt as to its fitness to be discussed on such an occasion." In this address he gives, by the way, the most complete and thorough review of the history of this disease I have ever seen. I do not intend to review this most excellent and exhaustive paper, but just picking here and there, give you an idea of the disease as it was then seen.

By this time, six years after Doctor McGraw's report, it is evident that the unicity of the disease has been fairly well established and the argument centers around the relationship of syphilis and tuberculosis. Says Gross "what is called scrofula or tuberculosis is I have long been satisfied from careful observation of the sick and a profound study of the literature on the subject, in the great majority of cases, if not invariably, merely syphilis in its more remote stages. The affinity of scrofula and phthisis is now well established. That all these affections are of syphilitic origin I will not pretend to assert, but that most of them are I am abundantly satisfied from personal experience." He quotes Professor Furneux Jordon of England who very justly says, "We can man-

ufacture strumous disease at pleasure since all that is necessary is to bring into contact two persons affected with hereditary syphilis and they will be sure, especially if in addition to this taint they have a muddy complexion, to produce children one of whom will have phthisis, another Pott's Disease of the spine, a third coxalgia, a fourth enlarged glands or hydrocephalus." As a treatment, it is evident that his sheet anchor are the iodides, and that he believes that "syphilis in nearly every form and stage may generally be satisfactorily if not successfully treated without the aid of this metal (mercury)." In conclusion he says, "I have endeavored to show that when the syphilitic virus has once taken full possession of the system no mode of treatment hitherto devised is capable of permanently dislodging it or of neutralizing its effect. All that can be done, even with the aid of the most approved remedies, is to stay for a time its action."

Let us be thankful that the progress of medicine now permits us to discard this very pessimistic view.

The term "consumption" in that day embraced not only tuberculosis but those strumous and catarrhal infections that had resisted medication. Accepting this view it is still interesting to know that consumption heads the list of fatal diseases in an overwhelming way. In 1860, of every thousand persons who died in Maine 295 were entered up as having died of consumption, New Hampshire 266, Massachusetts 234, Tennessee 110, Illinois 109. In a report on the epidemic diseases of Illinois, (Trans. A.M.A. 1867), the favorable showing of Illinois as compared with Massachusetts is based first on the topographical differences. Illinois being a prairie state, Massachusetts being hilly and mountainous "in consequence of which the electric state of the atmosphere varies on opposite sides of the same elevation." Sudden changes in temperature, as a result of ascending and descending the elevation, subjects the individual to a succession of physical influences which in their tendencies favor the development of local congestion and inflammation. But whoever wrote this report was very close to the truth when he emphasizes the fact that the New Englander lived in air tight houses with air tight stoves, while comparatively few families in Illinois had arrived at the luxury of an air tight house from which the pure air could be excluded.

In the Transactions of the Michigan State Medical Society for the year 1867-68, I find

"A Report of the Committee on the Zymotic Diseases" by Doctor E. P. Christian of Wyandotte. Right here let me say that no one can read this paper without being impressed with the fact that Doctor Christian must have been a man of unusual reasoning powers and marked scientific insight.

This paper is of particular interest to us since it indicates the point of view of fifty years ago in reference to the infectious diseases. Be it remembered that the specific causes of these diseases were not to be discovered for more than fifteen years. The profession at this time accepted the so-called zymotic theory—namely; that the cause of these diseases is organic matter capable of multiplying itself in the fluids of the body. The conception of the specific entity is, however, that of the modern "ferment" rather than the bacillus. Nevertheless, they recognized that typhoid, diphtheria, smallpox, and the eruptive diseases were contagious and had a definite incubative period. Christian speaks of these diseases as the "area incognito," and calls attention to epidemics in the state during the current year, 1867, of typhoid and diphtheria. The former characterized by marked virulence and "what seemed unequivocal evidence of a contagious element attaching to it." The diphtheria epidemic was milder and was treated by the author, "uniformly successfully," he says, by large doses of quinine and tannin, with a wash of saturated solution of tannin. He notes that these diseases are disposed to manifest an epidemic relationship, such as typhoid and erysipelas, puerperal fever and erysipelas, scarlet fever and erysipelas, measles concurrent with or followed by scarlet fever and others. This epidemic relationship has been expressed by the phrase "epidemic constitution of the atmosphere," but the author does not believe that this explains it.

"Now," he says, "are there any facts in the natural history of these diseases or any presumptions from the analogies of nature which may throw light upon the subject."

"In the classification of the animal and vegetable kingdom we observe the 'Succession of Life,' in the regular graduation of species, a law upon which has been founded the theory of the 'Transmutation of Species.' Beginning at the top with man, we descend through a succession of species allied by anatomical structure and physical function to the lowest, or what appears to be the connecting link between the animal and vegetable kingdom, the sponge. And then again, beginning with the higher

organization of this kingdom we descend through successive links to the lower, to the ferns and fungi, to microscopic, parasitic growth, of which class some are supposed to be the cause of certain disease, at least if not a cause an element of the diseases, and still further onward in the series of fermentation upon the presence of which in the organism is founded the theory of causate or of zymotic diseases."

"Now if the same localities and conditions favor the germination and growth of allied species, which is certainly the case, at least within certain limits, and if allied species may be supposed to possess similar natural properties; that is, if the same law pertains to these lower order of organisms as to higher, and if the theory of the zymotic origin of these diseases be correct, we have in these facts some explanation of their epidemic relationship or concurrence."

Pursuing the analogy he raises the question whether civilization in its different stages and phases may not create a proneness to new and different forms of disease action.

Please note here that just now the laboratory man is showing us that there is a transmutation of species in germ life. An excellent example is Rosenow's work on the Transmutation of Streptococci to the Pneumococci, and vice versa, while Foulerton has shown the possibility of transmutation from the branching forms of the mycelium and streptothrix to the bacillus tuberculosis. There is then in the laboratory at least an evident relationship between the causative factor of actinomycosis and the bacillus of tuberculosis. Christian and the men of his day were getting "warm" as a small boy would say, in their hunt for the specific cause of disease, and their labors were shortly to see their full fruition.

As one reviews the Transactions of the Michigan State Society for the first five years, he finds that after all these men were interested largely in the things that we are interested in today. For the most part keen men doing their very best to solve the problems which confront them. They are having some of the same problems that we are having, for instance, at a time when the profession at large should have dropped some of their old foggy notions and accepted the advancement already made in medicine there are to be found a certain small minority, loathe to part with their old ideas. It is because of this, no doubt, that there is to be found in the transactions of 1870 a "Report of

the Committee on the Remedial Substitutes for Blood-letting," yet the lancet had quite a number of years previously been superseded in every large hospital of the country and its indiscriminate use condemned.

"The Contagion of Typhoid" is the subject of a paper, with the conclusion that the evidence shows that typhoid fever is often propagated by contagion, yet that cases are continually occurring which cannot be traced.

A report on the medical properties, more particularly the magnetic properties of the various springs in Michigan, serve to fill nearly the entire volume of the Transactions of 1871.

Vomiting of pregnancy was concerning them at this time, as it still is.

As a part of Doctor McGraw's excellent report to the State Society, in 1868, from which I have already quoted, he takes up the question of cancer and says "There is no disorder in the long line of human maladies which has received more devoted study than cancer. The profoundest intellects of the profession have labored in vain to discover the mystery of its malignity. It has been made to undergo the most rigorous analyses of chemistry, and the best chemists can give as a result only vague accounts of the diseased albumen. It has been subjected to the highest powers of the microscope, to the most minute examination of morbid anatomists, but neither microscopic nor dissecting knife have been able to unveil its secrets. Whatever we may do, cancer takes its course steadily and inexorably toward the grave." The malady has defied all investigation and all treatment, and he urges further investigation of this disease through organized effort on the part of the State Society, and particularly a careful examination into the relation between cancer and tuberculosis or other constitutional disease. It would seem that they were fifty years ago just as close to the discovery of the secret of cancer as we are today.

The State Society early started out with a conscious effort to improve the general health of the community. The hygiene of school children was made an early effort. Much of the issue of the Transactions of 1873 is given up to exhaustive reports of committees appointed for this purpose, who take into consideration the construction, warming, ventilation, and sewerage of school buildings.

That our fathers had the problem of the unlicensed practitioner to contend with, as we have today, is shown throughout the Presidential addresses year after year. I find particularly

interesting in the verbage used and in its forcefulness, the Presidential address of Doctor Jerome of Saginaw, the first that I find in the printed Transactions.

"The domain of medicine has been a sort of a fairy region, where the visionary theorists with their air-built castles and speculative fancies have roamed in search of the hidden elixir of life. Such investigators have astonished the world hitherto with their discoveries; their isms and pathies in countless numbers have swarmed along the pathway of medical science, and their adherents, too, have sounded out their praises with trumpet tongue.

"There has been vitalism and organism, humoralism and mechanicalism, eclecticism and galvanism, besides a multitude without number of minor isms. And where are they now? Echo alone answers where. They have dissolved into thin air, like the frost-work of an autumn's night; or have crumbled away from their own inherent rottenness, or overborne by their own unsupported and top-heavy weight, while around their final resting place their few remaining disciples gather to pay sepulchral honors.

"Are they dead, brethren, or do they sleep? They are not dead, but as the caterpillar of today coils himself in some nook or cranny, to await the coming of the new year, when his successor on gilded wing shall come forth far more beautiful and attractive than the original worm."

I trust that I have been able to give you some idea of the trend of medical thought fifty years ago. It seems to me that after all these men were thinking pretty clearly and were succeeding wonderfully well considering their handicaps. As we review the problems confronting the practice of this time, we come to a greater realization of the wonderful progress that medicine has made and is making, and to a fuller appreciation of the fact that it is only now that medicine, real scientific medicine, has come into her own.

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#### SUPPURATIVE ETHMOIDITIS.

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The ethmoid labyrinth, occupying practically all of the area of the upper half of the nose lying between the two lateral plates of the orbit, and extending from the posterior inner surface of the ascending process of the superior maxilla



to the anterior wall of the sphenoid labyrinth, obviously, is of considerable importance to the rhinologist. The magnitude of its surface exposure and its close proximity to the respired air with its numerous ostia, make it particularly prone to disease by contiguity and continuity, and were it not especially capable of eliminating foreign material, because of its well supplied and active ciliated epithelia, and of the comparative small amplitude of its cells, it would be a more frequent cause of trouble.

Its surgical topography, like the frontal and sphenoid, is uncertain, only more so, and in consequence of these numerous departures from the classic, the inhibition of one or more cells is easily impaired and pathologic conditions produced that advance the development of disease rather than oppose it. While this is too frequently so, nevertheless, there are sufficient fixed anatomic landmarks to justify the arranging of several standard operative methods, that place the surgical technic on a comprehensive basis, and probably fulfils all that is needed to obtain desired results.

Each lateral capsule is divided by the lamella of the middle turbinate forming two groups of cells, anterior and posterior, so called, and the arrangement of the several cells of these two divisions depend largely upon the dimensions and positions of the uncinate and ethmoidal bulla lamella for the anterior group, and of the superior and supreme turbinate lamellae for the posterior group. (Seydel). The middle turbinate lamella being situated unduly forward or backward gives us some hint as to the cellular arrangement and especially the size and number of the posterior cells.

These points can usually be well established by a careful examination, that should embrace all of the methods employed in sinus diagnosis and once obtained, the proper operative technic and route is easy of selection.

Suppurative ethmoiditis is practically always due to bacterial infection and usually presents itself in the chronic form, and also usually conjoined with the hyperplastic variety, and may exist as a latent unicellular empyema from an obstructed ostium or involve all the labyrinth with patent ostia. Fortunately, the majority of cases are limited in area to the anterior cells, and the earlier recognition of anterior ethmoiditis than formerly, with the acceptance of its import in the etiologic role of other nasal affections will largely diminish the frequency of infections of the other sinuses and probably myxomatous and atrophic lesions also.

It is not within the scope or time limitation of this paper, but I will presume at least to recall to your mind the frequency of a hyperplastic condition of the middle turbinate, associated with an atrophied inferior turbinate and limited to one side of the nose. The ethmoidal is susceptible to invasion by the same micro-organisms as the other sinuses and in the same manner, via the inspired air through the ostia, and as established by Killian through the blood or lymph-channels, but is more frequently invaded because of its being more concerned in the respiratory function of the nose, and of its greater frequency in departure from the classic in its cellular arrangement, thereby interfering with the normal drainage. This favors the development of an acute catarrhal ethmoiditis into a chronic form, with the production of the edematous sinus mucosa and the replacement of the ciliated epithelia by the squamous variety, thus impairing its eliminative powers and destroying its resistance to overcome any subsequent microbic invasion.

Unquestionably this resultant condition is a more frequent cause of acute rhinitis than is supposed even by the specialist and should not be minimized.

The treatment of suppurative ethmoiditis is largely surgical and although the determination of the micro-organism producing the infection is essential, particularly in acute cases, it is universally conceded, I believe, that the virulency of the infecting bacteria is secondary to defective drainage from congenital or acquired cellular aberrations as an index for prognosis. Preliminary to any surgical advance upon the sinus proper, all myxomatous tissue should be removed, especially under the middle turbinate, proper position of the middle turbinate and septum established and everything done to secure patent ethmoidal ostia, and avoiding any plan of treatment or effort at dislodging secretions that may produce extension to adjacent cells or sinus, or rupture of wall of sinus because of an existing dehiscence. The next step is where perhaps many feel is the parting of the ways, some favoring conservative surgical interference by opening some of the cells and securing improved drainage, confining their operative field within the nose. Other operators entirely eviscerate the ethmoidal cells following a middle turbinectomy, starting posteriorly, and again more recent writers, advocate beginning at the anterior cell and advancing posteriorly as indicated by their findings, and feel assured if necessary, of extending their efforts to every

part of the ethmoidal labyrinth and the sphenoidal as well, with the minimum of risk and thoroughness of work. Again our ultra-radical friends prefer entering the ethmoid cells from without the nose at the posterior border of the lachrymal bone.

I will not presume to even partially describe any of these methods so familiar to you all, nor to mention other surgical procedures well known to all of us; for it seems to me that every case is a law unto itself and while it might be best to adopt a radical course in all acute cases with complication or perforations, I prefer to incline to the conservative methods in most cases, and believe that my results have been satisfactory. Personally I have followed a plan the past five years in sinus work, that is only deviated from in exceptional cases. The patient is prepared in the usual way, and after cocaineizing and blanching the operative field, a few drops of a 5 per cent cocaine solution is instilled in the inner canthus of the eye, nasal retractors are applied, and the patient's head is placed as far back as comfort will permit. The index finger is then firmly pressed against the lachrymal bone of the affected side, and a Hajek curved hook or knife is passed to a point just above and slightly posterior to the anterior tip of the middle turbinate, and thus is opposite to the lachrymal bone and usually enters the anterior ethmoidal cell, force is exerted in a downward and slightly outward direction, the index finger at the inner ocular canthus acting as a preventive guide to perforating the orbital chamber, and even if you should, the damage is a slight one, producing a discolored eye of a few days' duration only.

The knife or hook is then replaced by the curette and the anterior cells eviscerated, from the nasal process to the middle turbinate lamella; this causes the anterior half of the middle turbinal to hang downward and is easily removed with the snare or cutting forceps. The operative field is then well mopped and all oozing stopped by applying adrenalin solution. An exploratory puncture is then made into the anterior cell of the posterior group; should this be found involved, the patient's head is changed so that the nasal floor is nearly horizontal and the head slightly tilted in the direction of the normal side. The middle turbinal lamella is then removed with the curette or cutting forceps and the nasal wall of the cells opened by making two parallel incisions, one above and the other below the middle turbinate, extending backward to the sphenoidal cell. This permits of the

easy removal of the remaining portion of the middle turbinate and the nasal wall of the cells, with their thorough evisceration. The superior outer angle of the posterior cell should be omitted in this procedure, owing to the danger of entering the anterior fossa or injuring the ophthalmic veins.

The sphenoidal ostium is easily probed and the outlines of the labyrinth established, and if desired its thorough removal accomplished. After the hemorrhage ceases, which usually is slight, a tamponade of a 25 per cent. argyrol solution is applied to the operative site and the nasal chamber loosely packed with cigarette drainage tubes; an ice-bag applied over the face for three or four hours after the operation seems to prevent post-operative hemorrhage and pain and afford much comfort to the patient.

58 Cadillac Square.

#### URETERAL OBSTRUCTION—REPORT OF AN UNUSUAL CASE.\*

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It is not my intention in this paper to go into a detailed account of the various etiologic factors causing obstruction of the ureter, but rather to consider one variety—that variety caused by a comparatively frequent congenital anomaly—in the hope, if possible, to point out a type of obstruction which is frequently attributed to a twisted ureter with a rather freely movable kidney, and classified as such under the heading of Dietl's Crises. While I do not say there is no such thing as Dietl's Crises, I am of the opinion that if more of these so-called cases of crises were subjected to modern methods of examination, it would be found that the trouble was due to something more than a twisted ureter and a movable kidney.

#### CASE REPORT.

Miss B. H., student, age 19; weight about ninety pounds; height 5 feet 2 inches. Entered my service complaining of recurrent attacks of severe pain in the right upper abdomen, accompanied by a visible swelling in the same region, (which would disappear with cessation of pain), loss of weight and extreme nervousness. Referred by Dr. W. H. Marshall, of Boyne City, to whom I am indebted for valuable notes on her early history.

*History.*—Father living and healthy. Mother met with an accident and the patient was born in the eighth month, the mother dying a few days later.

As an infant she cried a great deal and was said

\*Read before Surgical Section, Fiftieth Annual Meeting, Grand Rapids, Sept. 1-2, 1915.

to have had many attacks of "colic." During early childhood she had measles and mumps and was subject to very frequent attacks of epistaxis. She also had recurrent attacks of abdominal pain that had been variously diagnosed "indigestion," "appendicitis," "renal calculus" and "nervousness," by different attendants.

Menstruation became established at 16 and has been normal since.

Dr. Marshall first saw the patient on the evening of May 21, 1914. She had been at school during the day but had suffered from pain in the right abdomen which had progressed from a dull ache at noon to a severe colic at 10:00 p. m. At this time she was writhing in agony, had vomited, was very "nervous" and was on the verge of collapse. She was curled up in bed with her knees drawn up on the abdomen. Temperature 99.2; pulse 110; respiration 25, pupils dilated. Urine scant, acid, specific gravity 1022, albumin and sugar negative. She was given one-sixth grain morphine hypodermatically and in a short time was narcotized enough to permit further examination.

*Examination.*—She was a rather slender girl, weighing about ninety-five pounds. Her build was rather typical of "Habitus Enteropticus." On the right side of the abdomen extending from the right hypochondrium to the right iliac region was a smooth, fairly regular, elongated, fluctuating tumor. This tumor was but slightly movable and was tender to touch. There was a moderate degree of spasm of the muscles of the right abdomen. The ascending colon was in front of the tumor. Further physical examination of the patient revealed nothing abnormal.

On the following morning, May 22, the tumor had entirely disappeared and she felt quite well. She had passed a quantity of clear urine which was acid in reaction, with a specific gravity of 1015, no albumin nor sugar but the sediment showed many epithelial cells, no pus nor blood. She stated that this attack was typical of those she had had for several years, and that the attacks were more frequent when she was tired and exhausted, and that over-exertion would always precipitate an attack.

*Course.*—On June 9, 1914 Dr. Marshall attended her in an attack that was typical of the one just described, and, concluding the case was surgical referred the patient to me, having made a clinical diagnosis of intermittent hydronephrosis, of probable congenital origin.

On June 22 she presented herself for examination, having had no recurrence since June 9. The abdomen at this time was scaphoid in shape and deep palpation showed a movable, normal sized right kidney that was somewhat tender as it slipped between the palpating fingers, there was tenderness on firm pressure over the region of the appendix. The patient appeared highly nervous. Urination was normal and unaccompanied by pain.

The following day, after preliminary preparation, X-rays were made of each kidney with negative results. Examination of a twenty-four hour speci-

men of the voided urine was likewise negative. She stated she felt usually well and so far had no premonition of an oncoming attack. She was allowed to go about as usual but was kept under daily observation.

July 4 she suffered another attack, similar in all respects to the ones already described. Examination showed a marked rounded tumor in the right abdomen that was slightly movable, and distinctly visible because of the thinness of the patient. Morphine hypodermatically was necessary to control the pain. As soon as possible X-rays were made again but without revealing anything valuable in diagnosis other than an entire absence of shadows of a suspicious character. The urine expelled when the tumor subsided was pale amber, very slightly cloudy, acid, specific gravity 1009, albumin and sugar negative. The sediment showed some bladder epithelium but no casts, some urate crystals. The "thalein" functional tests showed nothing of importance. She was in a too nervous state to permit collargol injection following bladder and ureteral exploration and inasmuch as the left kidney was normal, it was considered best to use but one anesthetic and operate at that time.

*Operation.*—Accordingly, on July 8 the patient was etherized and an abdominal incision was made, beginning just below the navel, at the outer margin of the right rectus muscle extending downwards for two and one-half inches. The lower liver border was about one finger breadth below the level of the navel, the transverse colon was at the brim of the pelvis, a general visceroptosis of the entire abdominal contents. The appendix was large, adherent throughout one-half its length, was removed and the stump invaginated. The pelvic organs were negative. The right kidney was palpable beneath the incision, was freely movable, and presented no evidence to palpation of obstruction either in the ureter or pelvis, by any hard body. The incision was rapidly closed, the patient turned on her face with elevation of the lumbar region and an incision made in the right lumbar region extending from a point about two and one-half inches from the dorsal spines behind the twelfth rib extending down and out along the border of the quadratus lumborum nearly to the crest of the ileum. This incision proved ample without dividing the rib, to expose and elevate the kidney. The fatty capsule was stripped away and the pelvis examined. Three adherent vessels were found to cross the ureter at its upper extremity near the pelvis in such a manner as to cause obstruction with resultant dilatation of the pelvis when the kidney moved downward in its scanty bed of fat. These vessels were ligated and divided, examination of the pelvis and ureter at this point showed no constriction, no pelviotomy was necessary. The kidney itself was of the lobulated foetal type, apparently healthy. The capsule was split and stay sutures inserted and anchored to the inner margin of the wound and the wound closed with a small roll of an old rubber glove inserted in the lower angle for drainage. This was removed at the end of twenty-four hours.



*Post-Operative Course.*—The patient made an uninterrupted recovery, both wounds healing by primary union. She was discharged from the hospital about three weeks later and up to the present time has had no recurrence of her old trouble.

As has been pointed out by Peterkin of Seattle, (1) "There are no two pelvis exactly alike, even in the two kidneys of the same individual," it obviously follows that the blood supply to the organ must likewise vary accordingly, in the size, number, and location of entrance into the gland. Marked variances in blood supply are looked upon as minor anomalies when discovered at autopsy or in operations upon the kidney for other lesions and perhaps no great importance is attached to them. However, they are occasionally the cause of disturbances which often become necessarily surgical, by obstructing the ureter near the pelvis of the kidney, causing a hydronephrosis which may become intermittent, or result in a constantly dilated kidney pelvis, and as such should be classified in the same category surgically as any extra ureteral type of obstruction.

Ligation and removal of the vessel or vessels may or may not remove all trouble, if the condition of hydronephrosis has become a chronic one, we are apt to find a constriction at the point of obstruction necessitating a plastic operation on the pelvis of the kidney to overcome the difficulty, using a fatty fascial flap, formed from the fascia attached to the organ to cover the line of suture as is carried out in the Mayo clinic (2).

I do not intend to convey the idea that all cases of anomalous or aberrant vessels of the kidney will cause obstruction for, as previously stated, anomalous vessels were frequently found at autopsy or when operating for other troubles and no great surgical importance attached to them. If this condition is, therefore, so comparatively frequent, does it not stand to reason that when coupled with the condition of movable or floating kidney, or visceral enteroptosis it is more likely to be the real cause of the crises and resultant hydronephrosis than a "twist" in the ureter? In order to twist the ureter sufficiently to cause obstruction enough to produce a visible and palpable tumor the kidney would have to turn on its axis.

In the case just cited we have the patient's own statement that if she was on her feet enough to become exhausted, it seemed to precipitate an attack. This was no doubt due to the fact that the longer she was on her feet, the lower the kidney settled and the tighter it

drew the ureter across the obstructing vessels.

When on her back, under the opiate the pressure on the ureter coupled with the natural tendency of the kidney to resume its normal position, the ureter would become straightened and relief would follow the descent of the urine into the bladder.

Selby (3) in 1912 in reviewing some 300 cases of collargal injections into the kidney pelvis, and ureter, from the Mayo Clinic reports one case which showed a rather marked shadow in the line of the right ureter and kidney which revealed a hydronephrosis when subjected to cystoscopic examination, and at operation was found to be due to obstruction from an anomalous vessel.

#### CONCLUSIONS.

From the foregoing I have arrived at the following conclusions:

1. That intermittent hydronephrosis is undoubtedly more often due to obstruction caused by an anomalous blood vessel than is generally supposed.
2. That many of the cases of Dietl's Crises are attributable to this fact.
3. That with the modern methods of investigation now at hand, cystoscopy, ureteral catheterization and an injection, functional tests, cultures, X-rays, combined or separate, few lesions of this nature should be allowed to escape improperly diagnosed.
4. Treatment of this condition, essentially surgical, is not attended with the same element of danger as is obstruction from other causes.
5. Other things being equal, the mortality rate in this class of cases should be practically nil.

#### DISCUSSION.

DR. C. G. DARLING, OF ANN ARBOR: I have listened with the greatest pleasure to Dr. Witter's report of this case and there are some very useful hints brought out here in regard to the diagnosis and operating upon cases of renal colic, of renal calculus. You may sometimes find the calculus in unexpected places. A few years ago, I was called out to a farmhouse to operate on a case of appendicitis covering a week or two. I cut down into this abscess and I found in the region of the appendix a renal calculus which had evidently fallen there by gravity from the kidney, had worked down to the tissues at this point and become lodged there. When this abscess was opened, the tissues were so badly damaged that it was followed by three fecal fistulae. These three fecal fistulae were followed by fourteen weeks in bed before the condition got to a point where repair of the fistulae could be made. I speak of this as indicating one of the complications that

may attend forms of renal calculus. It does not matter so much whether the twisting of the ureter follows formation of the calculus, or whether there was some malformation; except in this way, that after the calculus is removed and the kidney put in place, we can safeguard the kidney.

DR. GEORGE C. HAFFORD, ALBION: These cases, I think, have been in the past overlooked a very, very great deal, at least not diagnosed. I saw a case last year that had been in existence for years. An operation revealed very little kidney tissue left, just enough so that there was a secretion of urine with occasionally an obstruction. Apparently, the patient had been on her feet a great deal. There was a large, palpable more or less movable tumor, which was down in the pelvis. At the operation, the kidney was resected. There was no evidence of stone; if there ever had been one, it had disappeared somewhere; and it was impossible to see whether the obstruction was due to aberrant vessels or not. On resection of the kidney there was found to be but little of the kidney structure left, there was simply a large sac which evidently at times filled up with urine, giving symptoms of crisis. The patient had suffered so long that she was a nervous wreck, but her recovery was good.

DR. C. GEORG, OF ANN ARBOR: I was very much interested in Dr. Witter's paper on obstruction of the ureter and I should like to relate an interesting case which I saw in the clinic, the operation being performed by one of the greatest surgeons in this country. This case was one of a young woman who had had a pus condition. She had had an operation for the relief of pus in the kidney two years before the operation that I am going to relate. At this particular time, the pus, although it had ceased to discharge, had once more commenced to cause trouble. An X-ray was made. [I am reciting this case because it shows the importance of thorough X-ray examination.] In this case, the X-ray examination showed a dilated hydro-ureter. It was dilated by a stone, so that the case was supposed to be one of stone in the ureter. The dilatation was considerable. The patient was prepared for operation an incision was made in the lower portion of the abdomen over the ureter to remove the stone. The stone was located in the lower third of the ureter, not very far from the bladder. Incision was made down to the stone and the stone was removed. It was a very large stone. In handling the ureter, the operator accidentally ruptured it at its entrance into the bladder. Of course, this was a very serious complication in a pus case, but he clamped the ureter at its entrance into the bladder and then tied it off with catgut. He then decided to remove the affected kidney from that side, so the patient was turned over and the field was prepared with iodine. An incision was made over the kidney and when the operator got down to the affected kidney he found to his amazement and that of all of us who were spectators that it was a horse-shoe kidney, a condition which was not known before the time of operation. I have talked with various X-ray experts about that case and a good many say that by the proper use of ureteral injections of collargol that condition could have been diagnosed before the time of operation. The operator simply

clamped the diseased part of the kidney and removed that and sutured off the healthy portion. It shows how a man has to use good judgment in an emergency of this kind, because things often occur in an operation that are not looked for.

DR. FRANK C. WITTER, PETOSKEY: I might say that this patient was a little peculiar in that she was so young and small, so very emaciated, and the small distended kidney pelvis was so low in the abdomen, which really exaggerated conditions. One would have thought there was an enormously dilated pelvis there. I was very much surprised when on opening behind—of course, there was no collection there then—that there was no very great distention of the pelvis and no great distention of the tissues. Before we started the functional tests, we thought there might be considerable destruction. I really did not expect to have to remove the kidney. But under conditions where there is destruction of the kidney tissue or where the pelvis of the kidney does show more dilatation. I think it is better to take out the kidney entirely.

In regard to the flap, it was merely a flap twisted over from the capsule of the kidney to cover the line of suture. In doing any work on the kidney pelvis to remove stone, or for enlarging a constriction, I simply split it and sew it up so that the line of suture is in an opposite direction from the split which widens the area. There was not enough destruction of tissues to warrant removal of the kidney. I have followed up the case for a year and there has been absolutely no recurrence of the trouble.

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### THE RELATION OF HYSTERIA TO OTHER DISEASES.\*

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The disease which has afforded the widest scope for errors and has covered a multitude of sins is hysteria. This striking fact is explained

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by the circumstance that while hysteria is a very definite disease and arises from very definite causes, being associated with other nervous diseases or diseases other than those of the nervous system, it conceals the nature of the physical symptoms of the disorder with which it is associated and vice versa. Naturally the question arises what is hysteria and how can its symptom-complex be definitely differentiated from that of other diseases? There are many theories.

In part at least are the teachers of the subject and the authors of books on neurology and psychopathology responsible for many of the errors in the diagnosis of the disease.

In reviewing the more recent books on the subject, I have selected paragraphs from one which I regarded as the most definite and of the most value to the physician as a basis for diagnosis. I quote as follows: "Hysteria is a disease of the mind which finds its manifestations less in intellectual disorders than in changes of character and mood and which conceals its intimate nature behind an almost unlimited number of physical symptoms."

The disease commences in youth at the time of puberty and the years immediately following. The germ of the disease is very often congenital and inherited. Direct heredity is very common. The children of hysterical mothers are either hysterical from birth or they inherit so marked a predisposition that any shock to the nervous system may cause the disease to develop.

The definition, the psychological analysis and the neurological limitations of hysteria are associated with very great difficulties, which lie partly in the nature of the affection itself and partly in the fact that it is often combined with other neuroses especially neurasthenia and other psychopathic conditions.

Then the author quotes other authorities as follows: "Charcot and his pupils regard hysteria as always being an inherited disease, all other factors having merely the significance of 'Agents provocateurs,' i. e. exciting causes which rouse the latent disease but which could not create it." Further he quotes: "Babinski; It is an abnormal mental condition which manifests itself by primary phenomena and secondary or accidental symptoms. The anomalies chiefly involve the sphere of the emotions and consists in a lack of proportion between the intensity of the stimuli and the strength of the sensory reaction."

Then follows the description of numerous symptoms as is customary in all the books; which may or may not occur, among these as

the most frequent are mentioned: spasmodic laughing and weeping, exaggerated suggestibility, auto-suggestion, excitability or indifference to painful stimuli; lack of control of outward expressions of the emotions, instability of character, etc., while in fact these signs are not so common, are more variable than would appear from the description in the books nor would the presence of any one of them or even a group of them establish the diagnosis of hysteria.

Whether we have before us the familiar type of patient who is stubborn or refractory, whose illness seems to be produced by pure wilfulness and the patient who is hypersuggestible and whose disorder seems to be a matter of simulation and lastly the patient who actually seems to manufacture symptoms and who appears to be a deliberate malingerer, makes little difference and although apparently an unsolvable chaos, the physical stigmata will unquestionably determine whether or not we are dealing with hysteria. While none of the above mentioned psychic stigmata (perverseness, wilfulness, simulation and malingering) represent justifiable conclusions, nevertheless the feature common to all types indicated is that of a manifest resistance against recovery.

However much the patient may protest to the contrary, there is a mental force striving against the idea of health, differing in this from any form of organic disease, it is a rule without exception. On the other hand a patient suffering from disorders which are liable to be confused with hysteria (manic depressive insanity, dementia praecox, neurasthenia) are as a rule strikingly free from the physical stigmata of hysteria.

In treating of the diagnosis of hysteria the books are largely concerned with the psychic stigmata of the disease, and relate little with reference to constant physical signs but dwell at length on the accidental physical conditions which are variable and in themselves often deceiving. For this reason the opinions of physicians are at wide variance as to what constitutes the pathognomic symptom-complex of hysteria.

To answer this question satisfactorily I will place before you the statistics gathered from 800 cases of hysteria admitted to the Neurologic clinic of the University Hospital, as they came under observation and were disposed of with the final diagnosis of hysteria. Many of these were of course associated with organic disease of the nervous system and more often with disease of other organs.



The psychic stigmata were as a rule indefinite and variable and it was in most of the cases difficult to determine where to draw the line between the normal and the abnormal. The accidental conditions were apparent to the patient and formed the chief complaints in the majority of the cases and could be brought under the following heads:

Amblyopia 3, aphasia 5, ataxia 2, backache 233, contractures 15, convulsions 38, deafness 9, diplopia 2, hemianaesthesia 42, hemiplegia 18, monoplegia 11, paraplegia 7, arthralgia 12, neuralgia 17, tremor 24, indefinite (pain in abdomen, nervousness, irritability, hyperemotional and mental depression) 362.

It is evident that definite accidental conditions are present in only a small proportion of the cases, about 25 per cent. In the other 75 per cent. they were not characteristic and might have been indicative of variable organic diseases.

The more definite and more constant physical stigmata: anesthesia of the conjunctivae, Graves sign, inframammary, inguinal and spinal circumscribed tender zones were present in all cases. In about 75 per cent. of the cases the whole group was demonstrated and in the remaining 25 at least three of the stigmata were found. Hysterogenic zones on both sides of the spine were demonstrated in about 40 per cent. of the cases. Hyperaesthetic zones were frequent (48%) and were sometimes identical with the hysterogenic zones. Anesthetic areas were almost constant (99%) in some parts of the body.

Among the 800 cases there were about seventy cases of hysteria in childhood, in all of them the disease was monosystematic, at least one symptom was so apparent that it overshadowed all other manifestations, and it is rather rare to observe a more or less complete symptom-complex in children before the age of ten years. The ages of these children were from five to ten years. The analysis revealed that constant physical stigmata were present in all of the cases. In a great majority there was anesthesia of the conjunctiva of one or both eyes associated with circumscribed areas of anesthesia and hyperesthesia; inframammary, inguinal or spinal.

Hysteria in childhood is not materially different from that occurring in the adult and in the adult it is a persistence of the disease in childhood in the majority of cases and its association with other diseases is purely accidental, although the type of disease with which it is associated may in a measure determine the

symptom-complex of the hysteria, i. e. some of the symptoms of the organic disease may form the psychic model for the physical expression of the hysteria, so that after the organic cause is removed some of the symptoms due to it may persist on a psychic basis. On the other hand and not infrequently the hysteria does not manifest itself until the patient is relieved of the organic disease. This is most common after surgical treatment.

The importance of determining definitely whether or not a patient is suffering from hysteria before stating the prognosis is apparent. If this is neglected, especially in operative cases, the patient and also the physician will be sadly disappointed in the result, and the physician's professional reputation will be at stake. You may draw your own conclusions from the foregoing study of 800 cases as to the pathognomonic signs of hysteria. I would not advise you to depend on the history of the case upon which the books usually lay considerable stress nor on the accidental symptoms alone. While some of these (hemiplegia, monoplegia, paraplegia, etc.) are peculiar *per se* and can be easily distinguished from the organic types, the majority of accidental conditions are indefinite and not characteristic.

It may be of interest to know that in the 800 cases of hysteria there were but seventy-eight males. There were twenty-two different forms of organic disease noted, in none was there a direct relationship between the organic disease and the hysteria except for the psychic influence already mentioned. Thirty-one presented themselves after operative treatment for disease of the pelvic organs. The majority of the cases continued to have pain in the inguinal regions and in the lower part of the back or abdomen.

In describing the cases, for the sake of brevity, I will mention only the positive findings or such conditions that may be of specific interest.

One patient of particular interest, a woman 42 years old, developed convulsions after an operation for lacerated cervix and perineum. She had these seizures at frequent intervals. The Wassermann test on the blood was positive and it was suspected that the seizures, although typical hysterical convulsions, might be due to cerebro-spinal lues. A lumbar puncture was made and the spinal fluid was found to be normal.

The neurological examination showed normal pupils and no extraocular palsy, no nystagmus and no eye fundus changes. The station and gait was normal, the tendon reflexes were all

increased but equal on both sides. The plantar reflex was normal on both sides. The conjunctiva were anesthetic, Graves sign was present on both sides and there was marked inframammary in inguinal tenderness on both sides, also spinal tenderness in the mid-thoracic and sacral regions. She made a good recovery after several weeks rest and isolation. She was also treated for syphilis. The diagnosis of hysteria with a leptic infection was established.

There were eight cases associated with neuresthenia. One case with spastic paraplegia due to syphilitic meningo-myelitis. Retrobulbar neuritis one. Brachial neuritis one. Facial hemiatrophy one. Sciatic neuralgia one. Appendicitis five; two of these I wish to mention in detail.

The patient, a single woman 30 years of age, came under observation October 10, 1914, complaining of gaseous and fluid eructations after meals and frequent attacks of nausea and vomiting. About once a week she had chills and some elevation of temperature. This condition extended over a period of eleven years. For eight to ten years she had suffered from constipation. In 1903 she had an attack of severe pain in the right inguinal region with nausea and vomiting. Her condition at this time was diagnosed appendicitis and she was successfully operated for this condition but the symptoms of which she complained continued. She had at more or less regular intervals attacks of pain in the right inguinal region with nausea, vomiting and constipation. She restricted her diet to the simplest food but found no relief. The physical examination of the patient revealed nothing of importance. She was well nourished in spite of the marked physical disturbance. The result of the neurological examination was as follows: The conjunctivae were anesthetic, the areola of both breasts were anesthetic to touch, hyperesthetic to pin point. There was marked inframammary tenderness on both sides. In both inguinal regions there were sharply circumscribed hyperesthetic areas, very painful on pressure. In the mid-thoracic and lower lumbar regions there were zones very painful on pressure. Otherwise the examination was negative. The diagnosis of hysteria was made and the patient treated accordingly, making a complete recovery.

A second patient suffering from pain in the stomach region and in the lower part of the abdomen. She was examined August 10, 1914. A young woman, 24 years old, who had not been well since her fourteenth year. During this period she had suffered from constipation, attacks of vomiting, loss of appetite and insomnia. In July, 1913, she had an abdominal operation for the purpose of determining the condition there and she was told that there was an intestinal stasis. The appendix was removed. She recovered promptly from the operation but was not relieved of her symptoms, after the operation her menses became irregular, once in two or three months and during the following year she was more or less confined to her bed.

*Examination.*—The conjunctivae were anesthetic and there were inframammary circumscribed areas of hyperesthesia, very painful on pressure, anesthesia and hyperalgesia of the areola mammae, marked inguinal tenderness on both sides, circumscribed inguinal hysterogenic zones, and a number of such zones on both sides of the spine located in the mid-thoracic and upper lumbar regions. There was no abdominal tenderness except in the zones just described and the physical examination was otherwise negative. This patient was treated for hysteria and made a complete recovery.

One case of Pott's disease. One of anterior poliomyelitis, one associated with renal colic due to kidney stone. One case of pernicious anemia. One of congenital syphilis. Three cases of hemiplegia due to cerebral hemorrhage. One of dementia praecox. All associated with hysteria.

There was one case of diphtheria of special interest.

The patient, a woman 35 years old, unmarried, was a stenographer by occupation and held a responsible position until six years ago when she was taken with a severe attack of diphtheria. She was confined to bed for four weeks. At the end of this time she had apparently recovered. About a week later she had difficulty in swallowing. A few days later she was unable to void urine and had difficulty in walking. The paralysis of the throat lasted about five weeks but the weakness in the lower extremities increased until the paralysis was quite complete. The difficulty in urinating improved but slightly.

When she came under observation six years later she complained of difficulty in walking and in voiding urine. She was catheterized once a day since the beginning of the trouble. She was able to void small quantities of urine but could not empty the bladder.

*Family History.*—The father, mother and one sister are said to have died of heart disease. The patient has always been nervous but aside from the ordinary diseases of childhood she had no serious illness until she contracted diphtheria six years ago. She was treated with antitoxin.

*Examination.*—The patient was well nourished and looked well. She is 5 feet 4 inches in height and weighed 155 pounds. There was no deformity of any kind. The heart and lungs were normal, the blood pressure was 130. The abdominal organs were apparently without pathology. The urine examination was negative and from all indications she had been treated very carefully.

She was unable to get up from the sitting or recumbent position without aid and was unable to stand or walk about, but was able to move the lower extremities when lying down, although there was considerable rigidity. The facial expression and manner were not peculiar and she did not appear nervous. The pupils were equal and reacted normally and the extraocular muscles were normal. There was no paralysis of the face, tongue or throat and no disturbance of motion of the arms and hands. In the lower extremities passive move-

ments were antagonized by the opposing muscles so that it was difficult to flex or extend the legs or thighs. The feet were usually in a position of plantar flexion. There was no atrophy or weakness in the lower extremities. The elbow-jerks were prompt and equal on both sides. The knee-jerks were diminished but equal on both sides. There was no disturbance of the sense of touch over the lower extremities. Pin prick was not painful over the outer side of the legs. There was marked hyperesthesia over the lower part of the abdomen and buttocks and there were inguinal, inframammary and spinal hysterogenic zones and dissociation of sensation of the areola mammae. The conjunctivae were anesthetic. The umbilical reflex was normal, also the plantar reflex was normal on both sides.

From the neurological findings it is at once apparent that the paralysis was not due to a diphtheritic neuritis and that a pre-existing hysteria was the basis for the present disturbance. The books usually state that disturbance of the bladder does not occur in diphtheritic paralysis but it has been observed in a number of cases in my experience. In this case it was no doubt in the beginning due to the acute disease but later on an accidental condition of the hysteria. The diphtheritic paralysis eventually formed the model for the physical expression of the psychic disorder. The patient made an uneventful recovery.

Two cases of hyperthyroidism with persistent vomiting which I will relate.

A young unmarried woman, 23 years old, presented herself for treatment complaining of vomiting without nausea.

She gives a neuropathic family history. She had diphtheria at the age of 10 years and made good recovery. At the age of 16 she developed an enlarged thyroid and a year later became nervous suffering from insomnia, palpitation of the heart, tremor of the hand, and exophthalmus, also nausea and vomiting. At the age of 18 she was operated for the removal of a portion of the thyroid gland and again at 19.

After this she was relieved of the palpitation of the heart, the tremor of the hands, the eyeballs receded. At the age of 20 she had an abdominal operation. The appendix and left ovary were removed. At that time she had pain in the inguinal regions, headache and irregular menstruation, also attacks of vomiting about three times a week. The vomiting stopped after the operation and for two years she was quite well, but about a year ago she was taken with nervous spells in which she falls down and becomes unconscious. After these attacks she vomits. The attacks come on about once in two weeks. Now the vomiting occurs during the intervals and in the past three weeks she has vomited after every meal. The patient thinks she has lost about ten pounds, in weight, but during the first three weeks she was under observation she gained in weight, although the vomiting after each meal continued during this period.

*Examination.*—The patient looks well. There were no stigmata of hereditary lues and no stigmata of deviation. She seemed quite content and hopeful. She is 5 feet 4 inches in height and well developed.

The pupils were equal and reacted normally to light and in accommodation. The extraocular muscles were normal, the tongue protruded straight without a tremor. There was no tremor of the lips, no facial palsy, a fine tremor of both hands on extension but no inco-ordination of the hands. Station and gait were normal, the knee and Achilles jerks were equal and normal and plantar irritation caused plantar flexion on both sides.

She feels pin prick more distinctly on the left side of the body than on the right. This extends directly to the median line. The conjunctivae were anesthetic. There was marked inframammary and inguinal tenderness on both sides, anesthesia and hyperalgesia of the areola papillaries.

The points of interest in this case are that the hysteria became more active after the organic condition was relieved, that one of the original symptoms persisted throughout the illness but changed in character from nausea and vomiting to vomiting without nausea, that all of the other symptoms disappeared and new ones occurred and from their character it is evident that a latent hysteria became active.

The patient was placed in bed in complete isolation without food until she herself realized that she could retain what she ate. After a period of seven weeks she was discharged well.

*CASE II.* Another patient, a young woman, single 30 years old, presented herself for treatment after a thyroidectomy which took place two years ago. Prior to the operation she complained of palpitation of the heart, tremor of the hands and nausea and vomiting in the morning upon arising, also was generally weak and her eyes were prominent. After this time she complained of nausea on arising in the morning. She has headache and pain in the left inguinal and both inframammary regions.

The examination of the patient revealed the following conditions: The mother died suddenly supposedly of heart disease at the age of 40. One sister died in infancy of convulsions. The patient had diphtheria at the age of 11 and typhoid fever at 18. She was then well until three years ago when her thyroid gland enlarged rapidly, her eyes became prominent and she suffered from dyspnea, she also had a marked tremor of the hands and she was generally weak.

The patient was fairly well nourished and physically well developed, had a worried expression and nervous manner. The eyes were prominent but otherwise normal. The thyroid gland was not enlarged, in fact, it could not be palpated. There was a small scar in the region of the thyroid in the median line. She had a fine tremor of both hands. Her station and gait was normal. The tendon reflexes were all normal, also the skin reflexes. The pharyngeal reflex was lost and the conjunctival reflex was also lost.

The conjunctivae were anesthetic. There was marked inframammary tenderness on both sides, dissociation of sense of touch and pin point of the areola papillaris. Inguinal tenderness on both sides and tender zones in the upper thoracic and



lower lumbar regions. Her pulse was 80 per minute, temperature 98.6 Deg. F. Blood pressure 125. From the above I knew she was suffering from hysteria but was not quite certain of the absence of hyperthyroidism. She was given five grains of thyroid extract three times daily, put in bed and completely isolated. On the third day her pulse was 128 per minute and she complained of suffocation. She was extremely restless and vomited several times a day. On the sixth day the thyroid was discontinued, the pulse rate diminished, the motor restlessness disappeared and the vomiting became less. The rest treatment was continued and she was given the Elix. Amon. Valerianate. In six weeks the patient was discharged minus her symptoms.

In two cases of tetany the stigmata of hysteria were very marked and are of diagnostic interest.

CASE III. A woman, 27 years old, married and has five children who are living and well. The family history is not of interest. Aside from the ordinary diseases of childhood she was well until the present trouble came on five months ago, following childbirth.

She has attacks which are initiated by paresthesias in various parts of the body. Then her eyes became fixed, the forearms and hands are rigidly pressed against the thorax, the thumbs adducted, the proximal phalanges flexed, the distal extending, the legs rigid in extension, the feet fixed in a position of talipes, equino varus accompanied with severe pain in the extremities. The attacks lasted from fifteen to thirty minutes.

The examination revealed the following: She was well nourished, her voice was weak and she appeared somewhat confused having just recovered from one of the attacks. The thyroid gland was enlarged and the post-cervical, inguinal and femoral lymphatic glands were easily palpable. There was a fine tremor of the tongue when protruded and a fine tremor of both hands on extension. At this time there was no rigidity in the extremities or the muscles of the neck and back. The biceps and triceps jerks were very prompt on both sides, the knee and Achilles jerks were increased on both sides. There was no Babinski sign. The Chvostek sign, Trousseau sign and Erb's phenomena were all present. The conjunctivae were anesthetic. There was marked inframammary tenderness on both sides and dissociation of sensation of the usual type, inguinal tenderness on both sides and hysterogenic zones of the back, thorax and abdomen.

The patient had several attacks each day for several days before she was treated. She was given fifty grains of calcium chloride intravenously which relieved her promptly of the seizures and with this the characteristic neurological signs of tetany disappeared. The patient left the hospital apparently cured, but returned four weeks later with seizures of an entirely different character. In these attacks the patient was apparently unconscious which was

not the case in the other seizures. She became rigid all over, extremities in extension and back arched. These attacks were of longer duration. The stigmata of hysteria persisted but there were no signs of tetany. She made a complete recovery under the usual treatment.

CASE IV. Another patient whose condition is interesting in this connection is a young married woman, 31 years old, complained of pain in the stomach region nausea and vomiting, and rigidity in the extremities. While under observation she developed attacks which came on with numbness in the extremities, then the arms became rigid in extension, slightly abducted from the body, complete extension at the elbows, the fingers in the obstetric position, the wrists extended. The legs rigid, slightly adducted, the knees extended, feet fully extended. This rigidity could not be overcome by passive movements without extreme pain.

The patient's family history is not of interest. She said that five years ago she had tuberculosis and was cured by sleeping out of doors. In 1902 she had an operation for the removal of an ovarian cyst. Part of the ovary was removed the ligaments were shortened and the anterior fixation of the uterus was done. In 1903 she had an appendectomy and panhysterectomy. Five years ago she began to vomit after each meal. These attacks lasted about a week, each accompanied by severe pain in the stomach region. Later they came on at irregular intervals, sometimes one or two months apart. In the past four weeks she lost about twenty pounds.

The physical examination was entirely negative. The stomach analysis revealed nothing of importance. The examination of the blood and urine were also negative.

The neurological examination revealed the usual stigmata of hysteria. There was no Chvostek or Trousseau sign and Erb's phenomena was not present. The diagnosis was in doubt owing to the tetanoid seizures. Yet they were not very different from the seizures we often observe in hysteria. The gastric symptoms were not unlike those accompanying gallstones or possibly gastric ulcer. The patient left the hospital unimproved but returned for an operation for gallstones. An exploratory operation revealed that there were neither gallstones nor gastric ulcer. It was certain that she had hysteria but from the neurological findings we could not prove the other suspected conditions.

A case of otitis media and mastoiditis associated with hysteria presented points of interest.

CASE V. A woman, 38 years old, married, but has had no children. She complained of pain in the right occipital region.

The family history was negative, as to neuropathic or psychopathic conditions.

Twelve years ago the patient was injured in a runaway. She was badly bruised in various parts of the body. Following this she became very nervous

and had attacks of dizziness, numbness in the hands and feet. Three years ago she had a gynecologic operation. Immediately following this operation she was more nervous and all of her symptoms became more pronounced from which she had not recovered when she came under observation.

Eight weeks prior to her admission to the hospital she developed an otitis media and acute mastoiditis on the left side but made a prompt recovery following a mastoid operation.

Since then she has been very nervous and about two weeks ago she began to have pain in the right mastoid region which gradually increased in severity. She developed night sweats and became tired and exhausted. There was marked tenderness on pressure on the right occipital protuberance, also just below the right ear. She also had dizziness at this time with pressure in the right occipital region, and at times nausea and vomiting. About a week after the onset of the pain she had an attack of numbness and paralysis involving the left arm and the left lower extremity. This passed away entirely in about an hour but later she found it a little difficult to use her left hand.

The patient had a second mastoid operation, this time on the right side. The mastoid cavity was found to be clear and smooth and the right ear was normal, showing that the mastoiditis on the right side was psychic in character dependent upon a pre-existing hysteria, as will be seen presently. The operation brought but temporary relief.

*Examination.*—The patient was well nourished. Behind the left ear she had a scar which was tender on pressure and the left ear showed the result of a radical mastoid operation. There was also an operation scar back of the right ear. The right ear was negative. There was marked tenderness on pressure over the right mastoid process.

There was a nystagmus on lateral deviation of the eyes but none on looking upward or downward. There was disturbance of taste of the anterior part of the tongue but normal on the posterior part of both sides.

The conjunctivae were anesthetic. There was marked inframammary tenderness on both sides. Light touch was not perceptible in the areola papillaris on either side, but pain sense was exaggerated on both sides. There was also marked inguinal tenderness on both sides and pain on pressure in the upper thoracic and upper lumbar regions. The post-pharyngeal wall was anesthetic and the pharyngeal reflex was absent. The tendon reflexes were all normal. There was no weakness in the arms or in the lower extremities. The patient was now treated for the nervous disease and made a good recovery.

Another case of interest which I will mention briefly is one associated with tonsillectomy.

CASE VI. A woman, 31 years old, unmarried and apparently in good physical health, complained of distress in the throat, sometimes a pain, at other times a feeling of fullness and burning. About a

year ago she had her tonsils removed on account of frequent attacks of tonsillitis.

The history revealed that her mother was a very nervous woman, she died two years ago of pneumonia. Aside from the ordinary diseases of childhood the patient was always well except that she had tonsillitis each winter for several years in succession but made an uneventful recovery from each attack. A few months after the last attack she had a tonsillectomy under a local anesthesia. Surgically her recovery was prompt but she did not recover from the psycho-sensory impression she received at the time of the operation which became very troublesome. She became sleepless and melancholy.

The physical examination revealed nothing of interest, but there were some interesting neurological findings which I will state briefly. The throat appeared normal but there was complete anesthesia of the post-pharynx, the tonsillar pillars, the uvula and soft palate and a portion of the hard palate. The pharyngeal reflex was absent, also the conjunctival reflex was lost. There was anesthesia and hyperalgesia of the areola mammae, marked inframammary and inguinal tenderness on both sides and a number of hysterogenic zones over the spine. The diagnosis of traumatic hysteria was made and the patient recovered under the proper treatment.

The symptoms of multiple sclerosis are at times difficult to differentiate from hysteria. There was one case of interest from this standpoint.

CASE VII. The patient, a woman 32 years old, complained of earache, blurring of vision, a speech defect, dizziness and at times unsteady gait. She stated that her father died young of heart trouble and she herself had never been strong. When she was 4 years old she had scarlet fever with a protracted recovery. A short time after this it was noticed that she was somewhat deaf and had difficulty in speaking certain words. This speech defect became more marked. Her speech was slow and halting. In May, 1908 she first noticed a twitching of her eyes and a muscular twitching in various parts of the body. She also had a fine tremor of the hands, became awkward and often objects dropped out of her hands, her gait became unsteady at times, dizziness and headache were frequent, sometimes accompanied by nausea and vomiting.

The physical examination revealed nothing abnormal. The patient was well nourished and there were no physical signs of deviation or congenital syphilis.

The neurological examination is of interest. The pupils reacted normally to light and in accommodation. There was a spontaneous nystagmus but no extraocular palsy. There was no paralysis of the face but a marked intention tremor of the lips and tongue, also a well marked intention tremor of both hands with inco-ordination of the hands and muscular weakness in both arms and hands. The gait was unsteady but not characteristic, the station was

normal. The elbow-jerks were increased, also the knee-jerks were increased. There was a well marked ankle clonus on both sides, the plantar reflex was normal on both sides, as was the umbilical reflex.

The conjunctivae were anesthetic, so was the post-pharyngeal wall and the pharyngeal reflex was lost. There was anesthesia with hyperalgesia of the areola mammae, inframammary and inguinal tenderness on both sides and spinal tenderness in the upper thoracic and mid-lumbar regions.

The ophthalmological examination showed paling of the disc in both eyes and multiple scotomata in the visual fields. Her speech was slow and halting, her hearing diminished in both ears. The Wassermann test on the blood serum and spinal fluid was negative.

The patient was treated by absolute rest and isolation. At the end of six weeks she was free from headache, nausea, vomiting, dizziness, staggering gait and the speech defect less marked. The nystagmus and the increased tendon reflexes persisted, also the blurring of vision and deafness. She was able to return to her occupation which is teaching, and is carrying on her work with little difficulty, and has done so for a year.

It is evident here that many of her symptoms were due to hysteria and those due to the multiple sclerosis were exaggerated by the hysteria.

Of course we must not overlook the fact that there are marked remissions of all the symptoms in multiple sclerosis and sometimes for a considerable period but there is no doubt of the hysteria in the case owing to the physical stigmata and the apparent permanent relief of some of the most distressing symptoms.

In the management of hysteria we must bear in mind that it is not a physical disease and to treat the disorder as a physical ailment is radically wrong. In the majority of cases one is able to demonstrate a certain endogenous predisposition. But in studying the personality

of the patient's family, as well as the general environment of her childhood, the endogenous predisposition does not appear so prominent as a causative factor of hysteria. Many times the neuropathic disposition is an acquired complex of nervous manifestations, the result of environment. However this may be, it is true that the resistance of individuals to outside influence is just as variable as their external appearance, so the effect of psychic or physical trauma is dependent upon the extent to which the individual is made actively to reproduce changes in his mental processes resulting in a pathologic reaction.

From the nature of the disease it is evident that the treatment must be psychotherapeutic and from the very beginning the patient should be made to realize the true state of affairs, that the symptoms are dependent upon a psychic state and that the treatment is not drugs, electricity, hydrotherapy or massage but mental re-adjustment. This is most easily accomplished by long conversation with the patient at definite intervals bringing to the conscious mind the full realization of the mental factors active in the causation of the symptom.

Many of these patients have become mentally and physically tired from the years of treatment—drugs, electricity, travel and the strenuous life of the sanitariums, that the monotony of complete rest and isolation is not only conducive to sleep but also an agreeable and valuable adjunct to the psychic treatment making the environment most favorable to concentration, attracting more constant attention to the present situation.

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*Hydragogin.*—The Council on Pharmacy and Chemistry reports that Hydragogin (C. Bischoff & Co.), advertised as a "most wonderful diuretic and cardiac tonic," is a shotgun mixture of semisecret composition, marketed under a therapeutically suggestive name and advertised by means of unwarranted therapeutic claims. Hydragogin is said to be a preparation of digitalis, strophanthus, squill and a saponin. The report explains the objection to the administration of digitalis and strophanthus in fixed proportion because of the varying rates of absorption and excretion of these two drugs. It further cautions that since digitalis bodies must often be given to the point of beginning toxic action in order to obtain the full therapeutic effect, it is

obvious that the administration of a mixture of digitalis, strophanthus, saponins and squill is especially liable to induce serious toxic effects which cannot be distinguished of the disease (*Jour. A.M.A.*, Sept. 4, 1915, p. 894).

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*Williams' Syrup of Malt.*—The Council on Pharmacy and Chemistry reports that Williams' Syrup of Malt is ineligible for New and Nonofficial Remedies because it is an official article marketed under an unofficial title; because unwarranted therapeutic claims are made for it, and because the claims made are apt to lead the public to depend on it as a curative agent in serious diseases (*Jour. A.M.A.*, Sept. 4, 1915, p. 895).



# The Journal

OF THE

## Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Arthur M. Hume, Chairman .....Owosso.  
A. P. Biddle .....Detroit.  
W. J. Kay .....Lapeer.  
W. J. DuBois .....Grand Rapids.

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November

### Editorials

#### POISONOUS FLY PAPERS.

A year ago, in discussing this subject editorially, we gave a partial report of the cases of arsenical poisoning of children from accidentally consuming the contents of fly destroying contrivances during the summer of 1914. It was gratifying to note the number of medical journals that reprinted our editorial or commented upon the subject. The discussion was evidently a timely one.

For the summer of 1915 we have been able to secure the reports of the following cases:

Month	No.	Fatal	Recovery Indicated	Recovery Doubtful
May	1	1		
June	2			2
July	5	2	2	1
August	14	5	8	1
Totals	22	8	10	4

These cases were reported by the daily press as occurring in the following states: Georgia, 1; Illinois 6; Indiana 2; Iowa, 2; Massachusetts, 2; Michigan, 2; Missouri, 1; Nebraska, 1; New York, 1; Oklahoma, 1; Ohio, 1; Pennsylvania, 2; a total of twenty-two cases. This report must necessarily be considered as very incomplete and but an indication of the possible extent of a wholly preventable danger.

We again point out the fact that the symp-

toms of arsenical poisoning are very similar to those of cholera infantum and that undoubtedly a number of the cases of cholera infantum that occurred were really cases of arsenical poisoning, and death if occurring, was attributed to the fact. The cases reported were of children ranging in age from 1 to 6 years. These little patients are not old enough to tell what they have taken when questioned as to their illness and unless they are seen consuming the fly poison the actual cause of their sickness or death is overlooked and the fatality ascribed to cholera infantum or to some other similar causes and the error in diagnosis goes undetected.

We repeat, arsenical fly destroying devices are dangerous and should be abolished. Health officials should become aroused to prevent further loss of life from their source.

Our Michigan Legislature, this last session, passed a law regulating the sale of poisonous fly papers. Similar enactments should be secured and enforced in every state in the Union.

#### THE WAYNE COUNTY MEDICAL SOCIETY—HISTORICAL SKETCH.

The Wayne County Medical Society as now constituted is a branch of The Michigan State Medical Society and the product of an evolution beginning in 1846 with the organization of "The Sydenham Society" of which Dr. Charles N. Ege was President. After a couple of years, this Society disbanded and on April 14, 1849, was formed "The Wayne County Medical Society" as a branch of the Michigan State Medical Society, having all the rights and obligations of that body. Disbanded in 1851 by the repeal of the laws under which it existed, it was followed by The Detroit Medical Society, May, 1853, whose first president was Dr. Morse Stewart. After an active career of about five years, it disbanded in March, 1858. From this date till 1866 there was no local medical society in this country. On May 31, 1866, there was formed the second Wayne County Medical Society. Its first president was Dr. Zina Pitcher; Vice Presidents, Drs. G. S. Armour and E. P. Christian; Secretary, Dr. H. F. Lyster; Treasurer, Dr. L. H. Cobb; meetings held quarterly. Early in 1876 it adjourned, *sine die*.

On August 21, 1876, the third Wayne County Medical Society, having been organized under the Presidency of Dr. William Brodie, was in-

incorporated under the laws of the State of Michigan.

Having amended its Constitution and By-Laws so as to conform to those of the State Society, it applied for and received a charter as a branch of that body on August 15, 1902, under the Presidency of Dr. Samuel Bell.

At this time there combined with it that branch of the profession which separated from it in 1876 and conducted successfully operations through the Detroit Medical and Library Association and the Detroit Medical Society. Besides it received the hearty support of the several medical clubs of the city. In fact the members of the latter were most active in promoting the unification of the profession of the county as a branch of the State Society. The names of these clubs are the Detroit Academy of Medicine (1868-1915); the Quarter Century Medical Club (1902-1915). Into it went the training of The Detroit Obstetrical and Gynecological Society (1884-1897) and The Michigan Surgical and Pathological Society (1891-1899). Since the first state society (1819-1851) served all the purposes of a county society in Wayne, the present organization may fairly be said to have begun in 1819 and with slight interruptions continued its evolution to the present, a period of ninety-six years. Under its own name the Wayne County Medical Society began operation sixty-nine years ago. Drs. George B. Russell and Peter Klein, and Morse Stewart, took an active part in the earliest of these stages of development.

The Wayne County Medical Society as now constituted differs from all its predecessors in that: 1. It aims to gather into its ranks every reputable practitioner within Wayne County; 2. It is the only door to fellowship with the other county medical societies throughout the state, such county medical societies being the units which constitute the Michigan State Medical Society; 3. It is the only means by which a Wayne county physician can either secure or maintain fellowship in the American Medical Association or any of its branches; 4. It presents an intelligent method for bettering the condition and promoting the development of the profession and its individual members in Wayne county.

On December 3, 1906, the Constitution was amended so as to make the Defense League, which was previously composed of only a part

of the members of the Society, an integral part of the Society.

The Defense League in connection with the Wayne County Medical Society was a success from the beginning and not only met with favor with the members of the local society but so appealed to the members of the Michigan State Medical Society that on January 1, 1910, the State Medical Society took over the Defense League of the local society and made it a part of the Constitution of the Michigan State Medical Society and it exists to the present time.

In the year of 1902 and 1903 the first "Wayne County Medical Bulletin" was published. Then for a space of six years the Bulletin ceased to exist. In 1909 the officers could see the necessity of having some means of communication with the members of the Society and so "The Wayne County Medical Society Weekly" was published and is still being published at the present time.

Early in 1910 sufficient enthusiasm had manifested itself in the members of The Wayne County Medical Society to encourage the election of a Board of Trustees and the authorizing of them to purchase a society building, which was to be paid for by popular subscription among the members. The Society, in order to own property, was incorporated by the Board of Trustees and on September 1, 1910, the first meeting was held in their present quarters (33 High St. E.) Owing to the increase of membership to over 600 in 1913, it was plainly evident that larger quarters for a meeting place were needed very soon, so the Trustees were authorized by the members of the Society to proceed with the construction of an auditorium at the rear of the present building to cost not more than \$30,000, which they did and the first meeting was held in it February 2, 1914.

In the spring of 1914 the members of the Wayne Medical Society thought that the constitution and by-laws should be studied with the idea of making such changes as would be for the betterment of the Society.

A committee of five was appointed by the President. In the fall of 1914, the committee made their report in which they recommended several changes in the constitution and by-laws and with a few minor changes these recommendations were adopted.

## OFFICERS OF THE WAYNE COUNTY MEDICAL SOCIETY.

YEAR	PRESIDENT	VICE-PRESIDENT	SECRETARY	TREASURER
1876-7	William Brodie.....	E. P. Christian.....	W. H. Rouse.....	G. R. Richards.....
1877-8	William Brodie.....	P. Klein.....	W. H. Rouse.....	G. R. Richards.....
1878-9	William Brodie.....	P. Klein.....	W. H. Rouse.....	G. R. Richards.....
1879-80	William Brodie.....	P. Klein.....	W. H. Rouse.....	G. R. Richards.....
1880-1	Peter Klein.....	E. S. Snow.....	J. J. Mulheron.....	G. R. Richards.....
1881-2	William Brodie.....	Geo. R. Richards.....	J. J. Mulheron.....	W. H. Rouse.....
1882-3	William Brodie.....	Geo. R. Richards.....	W. H. Rouse.....	E. S. Snow.....
1883-4	William Brodie.....	Geo. R. Richards.....	W. H. Rouse.....	E. S. Snow.....
1884-5	C. C. Yemans.....	J. J. Mulheron.....	W. H. Rouse.....	C. A. Devendorf.....
1885-6	C. C. Yemans.....	Wm. C. Gustin.....	W. H. Rouse.....	C. A. Devendorf.....
1886-7	William Brodie.....	H. F. Lyster.....	W. H. Rouse.....	C. A. Devendorf.....
1887-8	Geo. R. Richards.....	Hal. C. Wyman.....	B. P. Brodie.....	J. J. Mulheron.....
1888-9	C. Henri Leonard.....	D. L. Dakin.....	B. P. Brodie.....	J. J. Mulheron.....
1889-90	C. Henri Leonard.....	O. P. Eaton.....	O. S. Armstrong.....	Thos. Henderson.....
1890-1	J. J. Mulheron.....	D. L. Dakin.....	O. S. Armstrong.....	Thos. Henderson.....
1891-2	D. L. Dakin.....	O. S. Armstrong.....	James Newell.....	C. Henri Leonard.....
1892-3	O. S. Armstrong.....	James Newell.....	E. B. Smith.....	C. Henri Leonard.....
1893-4	Hal C. Wyman.....	E. B. Smith.....	R. H. Honner.....	C. Henri Leonard.....
1894-5	E. B. Smith.....	Samuel Bell.....	W. R. Henderson.....	C. Henri Leonard.....
1895-6	E. B. Smith.....	W. R. Henderson.....	F. S. Hough.....	C. Henri Leonard.....
1896-7	Geo. E. Frothingham.....	L. E. Maire.....	J. A. Patton.....	C. Henri Leonard.....
1897-8	L. E. Maire.....	A. H. Steinbrecher.....	J. H. Sanderson.....	C. Henri Leonard.....
1898-9	R. H. Honner.....	A. E. Carrier.....	W. J. Cree.....	C. Henri Leonard.....
1899-00	G. A. Kirker.....	F. D. Summers.....	W. J. Cree.....	C. Henri Leonard.....
1900-1	J. J. Mulheron.....	Samuel Bell.....	G. G. Gordon.....	C. Henri Leonard.....
1901-2	Samuel Bell.....	C. C. Yarbrough.....	Hugh Mulheron.....	C. Henri Leonard.....
1902-3	Frank Burr Tibbals.....	Chas. G. Jennings.....	Hugh Mulheron.....	Guy L. Connor.....
1903-4	Chas. G. Jennings.....	A. N. Collins.....	Guy L. Connor.....	Hugh Mulheron.....
1904-5	Guy L. Kiefer.....	Willis S. Anderson.....	W. J. Stapleton, Jr.....	W. J. Stapleton, Jr.....
1905-6	A. E. Carrier.....	Chas. D. Aaron.....	W. J. Stapleton, Jr.....	W. J. Stapleton, Jr.....
1906-7	J. H. Carstens.....	W. F. Metcalf.....	Walter D. Ford.....	Walter D. Ford.....
1907-8	A. N. Collins.....	K. Gunsolus.....	Walter D. Ford.....	Walter D. Ford.....
1908-9	W. P. Manton.....	A. H. Bigg.....	Guy McFall.....	Guy McFall.....
1909-10	A. D. Holmes.....	P. M. Hickey.....	Guy McFall.....	Guy McFall.....
1910-11	Angus McLean.....	P. M. Hickey.....	R. C. Jamieson.....	R. C. Jamieson.....
1911-12	H. O. Walker.....	B. R. Schenk.....	R. C. Jamieson.....	R. C. Jamieson.....
1912-13	E. W. Haass.....	L. J. Hirschman.....	R. L. Clark.....	F. B. Tibbals.....
1913-14	L. J. Hirschman.....	Don M. Campbell.....	R. L. Clark.....	F. B. Tibbals.....
1914-15	Don M. Campbell.....	Geo. E. McKean.....	C. E. Simpson.....	F. B. Tibbals.....

# TONSIL AND ADENOID OPERATIONS AT CHILDREN'S CLINICS OF NEW YORK DEPARTMENT OF HEALTH.

## EXAMINATIONS AND SAFEGUARDS.

1. The child is examined by a physician to note the presence of abnormalities that demand operative procedure.

2. A complete physical examination is made to make sure that the patient is a safe subject for operation.

3. The parent or guardian is interrogated as to the presence of contagious disease in the child's family.

4. A history card is made out for each child. On this are recorded clinical notes describing the conduct and condition of the child (whether lively, cheerful or reverse), condition of nutri-

tion, appetite, intestinal functions, presence of pulmonary signs, pulse, respiratory rate and temperature, and whether the child sleeps well. A specimen of urine is collected and examined before the child is operated upon. The record shows the specific gravity, the reaction and the presence or absence of albumen as detected by the heat and acetic acid test.

5. A child is not received for operation who shows a condition of seriously lowered vitality or has any organic disease. These children are referred to a physician for treatment and are requested to return later.

6. Upon admission to the clinic, the children are undressed and bathed and put in hospital garb. Younger children are bathed by the nurse, older ones under the direct supervision of the nurse.



7. The nasal fossæ are irrigated the night of admission and again on the morning of the operation. One quart of warm normal salt solution is used for these nasal irrigations and the soft rubber hose of the douche bag is inserted into the nostrils.

8. The day preceding the operation the children are kept quiet; are made to retire at 7 p. m. in winter months and 8 p. m. in summer months; are instructed how to inhale gas, and are admonished to be brave in the operating room for the sake of the benefits that will accrue from the operation.

9. The day of the operation the children are held in the playroom, and so far as possible their minds are diverted from the operation. About 6 a. m. they receive a bowl of cereal and a glass of milk. The history cards are written up, stating how they passed the night, condition of appetite and other functions. The morning temperature is taken by rectum. If this is found to be 99.5 Deg. F. or over, with a pulse of 120 or over, a special record of the fact is made in red ink. Such children are not operated upon that day.

10. The nurse makes a special inspection of the exposed skin surface and notes on the history card the conditions found, viz., whether clear or otherwise.

11. The operating room nurse accompanies the child from the playroom to the operating room, sterilizes the instruments and sees that all paraphernalia used at the operation is clean and sterile.

12. After operation the orderly carries the child to the bed, and the ward nurse takes charge, and stays with the child until the active bleeding stops. She takes the pulse rate and respiration rate and watches for swallowing symptoms. A pulse rate of 100 to 120, of poor character, thin, irregular, with the swallowing and suggestive signs of progressive weakness and air hunger, demands the presence of the operating surgeon at once.

13. The operating surgeon and anesthetist are available for four hours after the last child has been operated on. They must remain on duty after the operation and remain in the clinic until each child may be said to be out of danger. Emergencies occurring after a four-hour interval may be referred to the anesthetist

or any other inspector on duty. The assistant director is notified at any hour of cases of serious bleeding.

14. The registrar is required to report in writing any instance where the operating surgeon or anesthetist fails or is negligent in his duty.

15. The child is kept in bed from 10 or 10:30 a. m., the time of day the operation is performed, until 7 a. m. the following morning.

16. Bedside notes and the condition of the child when discharged are recorded in full.

*The Modern Hospital.*

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## "THE GOVERNOR AND THE DOCTORS."

### A REFUTATION.

Our esteemed contemporary—*The Detroit Medical Journal*—in its September issue has an editorial on the above subject, signed by Wesley Taylor. The following are selected extracts from that manifestly misinformed comment on the Tuberculosis Day that was conceived and fostered by official representatives of the State Medical Society.

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"The Governor asked the physicians of Michigan to gratuitously examine the lungs of any cases which might present themselves on a certain day."

"\* \* \* newspapers declared the results were practically worthless because of lack of system \* \* \* and the indefiniteness of reports."

"\* \* \* the layman was very much disappointed at the outcome."

"\* \* \* vague and indefinite reports were the rule." "So complete and confused were the findings \* \* \* that classification was found impossible."

"Those who fostered the scheme felt that their work had been for naught and that the doctors were to blame."

"\* \* \* The Governor unwittingly placed the average physician in an awkward position."

"To be sure it was a game of politics at the expense \* \* \* of the ever willing doctor."

"The Governor has placed many physicians in embarrassing position \* \* \*."

"Without going further does it therefore seem just that the physician should bear the censure

because the Governor failed to get the desired results from his political coup?"

The entire editorial vividly reveals the expressions of one who is wholly without information of the matter whereof he attempts to write. It is an unpleasant duty for an editor to reveal the manifest mistatements of a contemporary—happily the occasion does not arise over frequently and even then a majority of them may be overlooked with charity.

However, the editorial under discussion is so palpably unfair, abounds in such gross mistatements and is so perniciously slurring that we cannot conscientiously permit it to remain unanswered or forego placing our stamp of disapproval upon it.

For the benefit of the writer of the editorial and to set him aright the following facts are imparted:

1. Tuberculosis Day was conceived and the arrangements for its observance were made by the Committee on Study and Prevention of Tuberculosis of the Michigan State Medical Society. During the early summer the plan was suggested to us by the Chairman of that Committee. Its feasibility was discussed. A meeting of the Committee was held for its further consideration and the general outline of the plan perfected. The plan was submitted to officials of the society and interested workers in the Anti-Tuberculosis work who approved its promulgation.

2. The Chairman submitted to Dr. V. C. Vaughan, Sr., Dr. J. H. Kellogg, Dr. W. T. Dodge, and to the writer the letter that was sent to Governor Ferris respectfully requesting him to issue a proclamation creating Tuberculosis Day. That letter represented to the Governor the object of such a day, the good it was hoped would be accomplished and that it was the opinion of the Committee and other members of the profession that the entire medical fraternity of our state would cheerfully donate their time and services to make gratuitous examinations of all persons presenting themselves to ascertain the presence or absence of tuberculosis. Mindful of the history of our profession and its everwillingness to lend its time, efforts and influence for the prevention and relief of human ills the Committee felt warranted in making

such a representation to the Governor. It has as yet had no reason to alter its deductions in this respect.

3. The Committee felt that the day would be productive of greater results were the request for its observation and its establishment to emanate from the Chief Executive of our State. Further, it was felt that a Governor's Proclamation would forestall possible lay and press charges of the plan being one of a medical scheme to increase the doctor's interests.

4. In view of these facts which were presented to the Governor he unhesitatingly and cheerfully complied with the chairman's request and issued the Proclamation.

5. The plan was presented to our several county societies and those that held summer sessions unanimously endorsed it.

6. The various Anti-Tuberculosis organizations became interested and approved the plan by their active co-operation.

7. The leading daily papers of the state gave the day publicity and editorially endorsed the ends sought.

The foregoing facts warrant the statement that the *Detroit Medical Journal's* editorial, charging that the day was created as the result of "a game of politics," "a political coup" and an executive desire to embarrass the profession is an unwarranted and malicious untruth. Open acknowledgement and apologies are due the Governor from the writer of that editorial for such an unfounded and unwarranted insinuation.

The profession as a whole recognize the kindly interest of the Governor in the medical profession of the state and its problems. The profession has on many occasions experienced his hearty co-operation. The profession as a whole knows, although the writer of that editorial may not, that the Governor is over and above stooping to use the profession for personal or political machinations. We are indeed grateful to the Governor for the interest he has manifested in the doctors of Michigan and desire to assure him that the statements uttered by the writer of the editorial are not those of the majority of the profession.

The statement that "vague and indefinite reports were the rule," "incomplete and confused findings," "that classification was found im-

possible." That "the work was for naught," "the profession is censured" are all untruths and misstatements that are refuted and branded as false. In support of which we respectfully refer Dr. Wesley Taylor to page 536 of the October issue of this *Journal* which contains the committee report rendered to the House of Delegates at our Fiftieth Annual Meeting.

We have endeavored to discover the motive that evoked such an editorial exposition of erroneous deductions. We have been unable to lay bare the reason that justified its issuance. In charity we pass it by as an ill timed and poor effort to discuss a subject whereof the writer was misinformed.

Tuberculosis Day was a success. The plan was original and valuable—it has been copied by the National Association for the Prevention of Tuberculosis that is now endeavoring to conduct a Tuberculosis week nation wide, during December and which is planning to carry out the objects advanced for our Tuberculosis Day.

The educational feature was in itself sufficient for there is no doubt that many lay people learned the necessity of submitting to periodical examinations. In establishing Tuberculosis Day our Society promulgated a valuable plan for the ultimate achievement of the campaign that is being waged to eradicate and prevent tuberculosis—not withstanding the utterances of Dr. Wesley Taylor to the contrary.

### *Editorial Comments*

In the third number of *International Clinics*, 1915, Brady of New York pointedly discusses the present system of therapeutic prescribing as enacted by the internist of today. He states: "If medical practitioners were as careful and exacting in their technic as surgeons are, we fancy general practice would be a more attractive field than it is at present; medicine would retain the confidence of the people if doctors themselves could acquire a precise therapeutic technic, and there is no reason why such technic may not be acquired, unless it be indifference, for the scientific basis of pure medicine is fully as well established as is the scientific basis of surgery." "Every physician ought to take a critical inventory of his therapeutic stock in trade at least once a year, and find out just how much junk and trash has accumulated on his shelves or in his mind. By going

over the list with a determination to simplify and cast out wherever possible one will generally find much food for thought. Thought leads to study, and study means perfection of technic. The satisfaction and pleasure derived from medical practice are in a large measure determined by the quality of one's therapeutic technic."

Those in charge of the University Hospital advance the statement that they admit only those who are financially embarrassed and who present a letter from their family physician stating that they are worthy of care for which they are unable to pay. The statement is further made that such patients are operated upon before the class. This rule governing admittance is a good one and would call forth no complaint were it but lived up to and enforced. It is apparently an obsolete and convenient regulation. From the patients admitted from one community as a basis, we are inclined to the opinion that not a single week passes during which two or possibly more patients financially able to pay for all services, are admitted and operated upon in the University Hospital without the making of a surgical charge. That the sole reason for these patients going to Ann Arbor is to escape paying the fee of a local doctor and surgeon. The problem is a difficult one for the University authorities and the profession to solve. It can be solved and the imposition abated if the University operators will rigidly enforce the rule and build up their clinics from worthy poor patients and no longer abet the scheming patient who seeks to avoid an operative fee.

As a suggestion for county society programs and as an admirable means of stimulating larger interest, we are publishing the following program. Other subjects, surgical and medical, may well be adapted to this plan of selecting a list of five minute speakers.

The regular monthly meeting of the Houghton County Medical Society will be held at Scott Hotel, Hancock, on Monday Evening, August 2, 1915 at 8:30 p. m. sharp.

#### PROGRAM

##### Five Minute Talks

1. Can we diagnose Tuberculosis in one sitting except in marked cases?  
A. I. LAWBAUGH
2. The cardinal symptoms of danger in apparently healthy individuals.  
J. E. SCALLON
3. What one important fact can Auscultation give us?  
F. L. PIERCE
4. What important facts can we obtain from percussion and vocal fremitus?  
W. H. DODGE
5. The question of temperature in single or continuous observation.  
B. H. OLMSTEAD



6. Tuberculosis Day and what we wish to accomplish by it.  
A. F. FISCHER
7. The significance of sputum findings.  
M. D. ROBERTS
8. Special point in regard to Tuberculosis in children.  
R. B. HARKNESS
9. Form of history chart.  
JOHN McRAE
10. X-Ray in diagnosis.  
G. A. CONRAD

The mailing list of *The Journal* now exceeds 2,600. This is our highwater mark. The past two years has witnessed a gain of over four hundred copies. We would that sufficient interest might be aroused to secure the affiliation of the some 500 eligible physicians in the state who are not members of our Society. The problem is one that merits the consideration of the directors of every county organization.

Personal items and news notes are solicited for each issue. If you are in possession of any items that are of interest to the profession will you not kindly impart them to us for the use in *The Journal*?

Cabot states: "The vast majority of the causes for indigestion have nothing to do with the stomach, that is, with any disease of the stomach. There is not an organ in the body which may not produce gastric symptoms." Of 15,309 cases presenting symptoms of what is commonly termed dyspepsia there were 12,612 cases of non-gastric origin. The remaining 2,697 cases where the stomach was in itself involved included cancer, ulcer, anomalies of secretion, size and position. These case records warrant the abandonment of our attributing the cause of deranged stomach activity to dyspepsia. It behooves us to search further for an accurate diagnosis. The stomach mixtures prescribed are, as a rule, valueless.

In 15,770 cases the cause was found in: Failing heart, 2,922; phthisis, 1,929; anemias, 1,925; neurosis, 1,482; nephritis, 1,197; gastric ulcer, 1,140; gastric cancer, 1,050; dyspepsia (cause unknown), 624; gall stones, 620; constipation, 605; cirrhotic liver, 553; gastritis gastro enteritis, 546; duodenal ulcer, 360; gastroptosis, 130; hyperchlorhydria, 109; hypoacidity, 28; tabes, 22.

Of all cases in which the cause was directly traced to the stomach itself it was found that gastric ulcer and cancer existed in 2,190 cases, leaving 590 cases of gastritis, optosis, hyper-and hypoacidity and unexplainable conditions. These case studies certainly contain much for reflection and the adaptation of our future treatment in our patients who consult us complaining of their stomachs and digestion.

Daily the mass of evidence accumulates demonstrating the important necessity of detecting the seat of local infections and absorption if we are to bring about an abatement of symptoms and establish permanent recovery. Many conditions that fail to respond to treatment have eventually revealed a focus in the teeth and peri-dental abscesses that went undetected until radiographs revealed their presence. The extraction of the teeth, opening and draining the abscess, making of an autogenous vaccine and its administration has accomplished complete relief of symptoms and return to normal health in patients whose recovery was despaired of and who were consigned to the chronic class drifting from one physician to another without benefit.

In our September issue we published an article setting forth the working plan of the Detroit Physician's Business Bureau. We repeat, the plan carried out in Detroit is an admirable one that might well be adopted by the profession throughout the state. We would indeed be glad to learn of its adoption outside of Detroit and the success that is met. The profession as a whole must abandon its slipshod methods of collecting their accounts.

Your county society will become of greater value to you this winter if you assume an active part in its program. The notice of its meeting and the subjects to be discussed reaches you in ample time to enable you to allot a few moments to look up the subject and go over your own cases and thereby permit your participation in the discussion. You owe this to yourself and fellow member.

Much has been said and a good deal written about the young graduate, the young doctor's lack of opportunity to participate in the activities of the county, state and national medical societies. Certain writers in the daily papers have openly stated that the older men purposely seek to suppress the young doctor and to place obstacles to retard his attainment of a successful practice.

One who is in the least conversant with medical organization life and activity knows the absurdity of such a charge or statement. The opportunity exists, the young man needs but exhibit sufficient gumption to grasp it. He must realize that the discussion of his observations and writings are not "callings," "sitting down upon" or "snubbing." They are wholesome, constructive criticism calculated to enlarge his viewpoint and manner of thinking. They serve a broadening purpose calculated to make him a broader, more valuable member of the profession.

To become discouraged by such an experience stamps your calibre, calls out your number. To him worthy and desirous of succeeding we would say:

Dig in and make your dent in the world, and if you are made of the right material, the older men will invariably give you a hand and a proper steer to make the dent a deep one.

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### Correspondence

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September 27, 1915.

Editor, *The Journal*:

Dear Sir: At their meeting on July 22 the Regents of the University adopted the following resolution:

"Resolved, That the University Library announce to the medical profession of the State that the Library will serve the profession by furnishing, upon request, bibliographies and transcriptions of articles upon medical subjects, at the cost to the Library for such service."

This note is sent to you in accordance with the resolution of the Regents. The desire of the Library officers to serve the medical profession (as well as all other citizens) has been evidenced by their response to individual requests for years past. The ability of the Library to render freely an increasing service is limited chiefly by the imperative demands of its routine service to students and faculties. So far as possible, requests for bibliographic information on a specific topic will be gladly answered without charge. Prepared *lists of articles and transcripts* will be supplied at the cost of the service rendered. Arrangement have been made to have such requests answered promptly.

The University Library has now a serviceable collection of general scientific periodicals and transactions of societies. Its books on medicine and allied branches number some 38,000 volumes. In addition it possesses bibliographic resources which frequently make known the location of desired books and periodicals in other libraries. By the system of inter-library loans books can be secured for a brief period by an investigator either through his local library, or (occasionally) through the agency of the University Library. When a loan is not feasible, it is often possible to arrange to have the books desired assembled in advance and reserved either at Ann Arbor or some other library center for a personal visit.

Correspondence in reference to this service should be addressed to the Librarian, General Library, University of Michigan, Ann Arbor.

WM. W. BISHOP, Librarian.

### State News Notes

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At the annual meeting of the Detroit Academy of Medicine held October 12, 1915, the following officers were elected:

President—Dr. Charles D. Aaron.

Vice-President—Dr. Guy Connor.

Secretary & Treasurer—Dr. Alpheus F. Jennings.

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Drs. De Kliene, V. C. Vaughan, Jr. and J. B. Whinery conducted a tuberculosis clinic in Cadillac October 5, 6, 7 and 8. This is the first clinic conducted under the Board of Health's anti-tuberculosis campaign.

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Dr. M. L. Holm, recently appointed director of the Upper Peninsula Branch laboratory of the State Board of Health, tendered his resignation to take effect October 15. Dr. Holm will open a clinical laboratory in Lansing.

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Dr. B. D. Harrison, Secretary of the Board of Registration, secured the arrests of Daniel B. Weaver, O. J. Lofquist, J. Alton Watson and S. Clay Todd, all of Grand Rapids for alleged violations of the medical act.

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Governor Ferris delivered the principal address at the graduating exercises of the Butterworth Hospital Training School of Grand Rapids. A class of fourteen received their certificates.

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Mrs. Fred H. Humphrey, of Monroe, a sister of Dr. C. T. Southworth died at her home in Monroe on September 28. The *Journal* extends the condolences of the profession to Dr. Southworth.

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Dr. A. F. Stone, of Bay City, sustained the loss of his first and third finger of his left hand by reason of their becoming caught in the self starter of his automobile.

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Dr. A. W. Crane of Kalamazoo was elected President of the American Roentgen Ray Society at its annual meeting held in Atlantic City during September.

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The contract for the Mott Contagious Disease Hospital to be connected with the Hurley Hospital of Flint was awarded September 30 for \$14,000.

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A "Better Babies" contest was held under the auspices of the Child Welfare League of Kalamazoo during the week of October 4.

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Dr. C. G. Parnall, of Jackson, has been appointed

by the State Board of Health as inspector for Jackson and Lenawee county.

Dr. J. B. Murphy, of Chicago, will be one of the essayists of the Kalamazoo Academy of Medicine during November.

Dr. Samuel Bell and Dr. Jean A. Vernier of Detroit announced their marriage on August 13, 1915.

Dr. C. C. Webb, of Manistee, sustained a fracture of his right ankle September 29.

Dr. C. L. Girard, of Escanaba, has located in Marquette.

Dr. R. D. Joldersma, of Bloomingdale, has moved to Idaho.

### *County Society News*

#### **DETROIT SOCIETY OF NEUROLOGY AND PSYCHIATRY**

The Detroit Society of Neurology and Psychiatry held its annual meeting, October 7, 1915 at the Medical Building, Detroit. The following officers were elected:

President—Dr. G. C. Huber, Ann Arbor.

Vice-President—Dr. A. W. Ives, Detroit.

Secretary-Treasurer—Dr. Guy L. Connor, Detroit.

Members of Council—Dr. E. A. Christian, Pontiac; Dr. D. R. Clark, Detroit.

GUY L. CONNOR, Secretary.

#### **EATON COUNTY**

The fourth regular meeting of the Eaton County Medical Society was held at Pine Lake (near O'livet). This was a social gathering as well as a scientific meeting, the doctors being requested to bring their wives and friends. After enjoying a picnic dinner the following programme was carried out as announced:

Meeting called to order by President W. E. Newark; the Secretary being absent Dr. Sackett was appointed Secretary pro-tem. Minutes of the last meeting were read and approved.

1. History of Typhoid Fever,

Dr. Rockwell.

2. Etiology of Typhoid Fever,

Dr. Taylor.

Discussion by Drs. Burleson, Quick, Knight and Hafford.

3. Symptomatology,

Dr. Quick.

Discussion by Drs. Rockwell, Burleson, Knight, Newark and Sackett.

4. Prophylaxis,

Dr. Stimson.

Discussion by Drs. Blanchard, Rockwell, Blinn and Quick.

5. Treatment,

Dr. Sackett.

Discussion by Dr. Knight.

6. Dietetics,

Dr. Newark.

Discussion by Drs. Blanchard and Burleson.

7. Surgical Treatment,

Dr. Blanchard.

Guests were Dr. Hafford of Albion and Dr. Blinn of Charlotte.

The next meeting will be held at Charlotte, Nov. 18, 1915.

G. M. BYINGTON, Secretary.

#### **GRAND TRAVERSE-LEELANAU COUNTY**

The regular meeting of the Grand Traverse-Leelanau Medical County Society was held on Tuesday evening, October 12, at Dr. Wilhelm's office. The meeting was called to order at 8:30 by the President, Dr. J. F. Slepicka.

Dr. Wm. DeKleine, Director Division of Tuberculosis, State Board of Health, addressed the Society. Arrangements were made to begin the tuberculosis campaign in Grand Traverse and Leelanau counties the latter part of November.

W. D. MUELLER, Secretary.

#### **GRATIOT COUNTY**

The October meeting was held in the Circuit Court room at Ithaca. Eleven members and one visitor attended the business session. President Foust read a short article from the Medical World descriptive of an organization in another state, organized to publish, or exchange a dead beat list. After considerable discussion a motion was made and carried to have a committee of five physicians interview the doctors of the county, and report at the next meeting. President appoints Drs. Kilborn, Crane, Barston, Brainard, Graham.

President Foust read the following as the report of the committee on advertising. "The Gratiot County Medical Society hereby respectfully request that the publishers of papers in the county do not publish therein the names of any of its members in relation to any professional service rendered. This request is made to avoid any possible accusation which might be made against any members of using either directly or indirectly the news columns as a means of advertising.



On motion of Dr. Barston the Secretary was instructed to send a copy of this to every paper in the county.

Adjournment was then made to the residence of the Dr. and Mrs. Weller where partners were chosen by number for the dinner at the Seaver House. Thirty enjoyed a splendid dinner, after which all who could returned to the Weller residence where music, recitations and stories were given for a social hour.

All voted the "Get together" meeting, and especially having the wives along a real success. Every one hoped he would not have to wait a year before we have another.

E. M. HIGHFIELD, Secretary.

### TRI-COUNTY

During the first week in October Cadillac and Wexford county was the scene of unusual medical activities. The State Board of Health began its campaign against tuberculosis at this time. Dr. De-Kleine of Lansing had been here previously and made preliminary arrangements. Dr. V. C. Vaughan, Jr., conducted the first four days of the Clinic. The fifth day was conducted by Dr. J. B. Whinery of Grand Rapids. During these five days over seventy examinations were made. Out of this number twenty-six portrayed positive signs of tuberculosis, and eleven others were suspicious.

The Clinics were conducted in Cadillac, Mesick and Manton. The doctors from Wexford and adjoining counties attended the meetings in large bodies. Aside from the value to the people examined, the Clinics were of great worth to the physicians, as they were very instructive. In cases which had been under personal observation there were often elicited symptoms by the demonstrator which had been overlooked by the family physician.

The Clinics were instrumental in arousing a great deal of interest in the minds of the public and will be of lasting benefit. In the future early symptoms will be looked upon with suspicion and people will not rest until they consult their physician. This alone will be of value, as it will be instrumental in guarding and advising incipient cases.

On Thursday, October 7, the entire profession together with their guests enjoyed a most pleasant evening at the McMullen cottage on Lake Mitchell. The chef, Dr. C. E. Miller of Cadillac, had prepared a most bountiful and elaborate dinner. Dr. Miller is specially adept in this line; his culinary efforts would have pleased Epicureus himself, and so it goes without saying that the feast was at least partially responsible for the glad countenances of all

those present. After dinner a social session lasted into an early morning hour.

A most amiable feeling exists between all our members. At various intervals we gather together for an informal lunch or dinner, during which time questions of interest are informally discussed. At the present time there is a movement on foot to establish a laboratory and full time Health Officer in Cadillac, and as we appreciate the benefit which will be derived therefrom our hearty support is being given to the movement.

RUDOLPH J. E. ODEN, Secretary.

### WAYNE COUNTY

Meeting September 27, 1915.

Lung Abscesses (Illustrated),

Dr. Max Ballin.

Discussions by Drs. C. G. Jennings, E. W. Haass, Angus McLean, A. D. McAlpin, V. C. Vaughan, Jr.

#### NOTICE.

The Library Committee requests all members of the Society to send in the name of any particular book or books which they would like to have the Society purchase for the Library.

Robert C. Jamieson, M.D.

#### NEWS ITEMS—PHYSICIAN'S BUSINESS BUREAU.

John N. Bell, Business Manager

Phone Cherry 3489

While its members were enjoying the pleasures of a vacation the Business Bureau kept on sawing wood. The Board of Control met each week just the same. Though the summer months are poor collection months, yet we increased our collections over each preceding month.

One thing our members must do in order to get better returns in their collections is to get the full name and address of their debtor. The name Smith and lives on Jones street, does not help much as a number of Smiths may live on that same street. Many have accounts turned in for some time that had no information at that time and who could by calling the Bureau now give us such information as would help in making a prompt collection. Why not stop in at the office some time soon and go over your accounts, not collected, and help us in getting more information. It would be to your advantage. Call up the Bureau when you wish information. We would be glad to give you credit rating on names listed with us at any time during office hours.

There are evidently many who do not care for a Bureau run by themselves or they would support it. We hope to have greater enthusiasm during this coming winter.

Send in all your accounts at once and we will get busy. If your accounts are not being collected call and see what is the matter. We solicit criticism as well as information.

R. L. Clark.

#### REPORT OF HOUSE COMMITTEE 1914-1915.

In making out its report for the past year, your House Committee will not present to you a trial balance of the year just completed, as you have heard the report of your treasurer in which the different items of receipt and disbursements are given. But your committee desires to refer briefly to what has been done in the way of repairs, additions to the equipment and to offer a few recommendations for the coming year.

The auditorium has been rented to various organizations for musicales, dancing parties and theatricals. The gross receipts amounted to nearly \$1,400.00 (January 1 to September 1), where they were just over \$1,000.00 the year previous. The expenses in keeping up the auditorium were about \$700.00, leaving an income of about \$700.00 for the eight months. The income of the year before was \$400.00. In the outlay against the auditorium are to be found such items as resurfacing the floor, \$85.00; new piano, \$185.00; 150 new chairs, \$95.00, canvas tarpaulin, \$122.50 and its proportion of heat and light bills.

The heat bills amounted to \$883.60 as compared with \$931.49 the year before, a saving of nearly \$50.00. With more rigid economy and vigilance the saving should be increased still more.

The income and profit from the sale of liquors and cigars is about \$30.00 per month. A new steel safe was purchased for the office at a cost of \$50.00, for the safe-keeping of the Society's documents. Purchases were made to complete the equipment of the cafe, such as new dishes, new linen, a new coffee urn, etc. An incinerator to burn up the garbage was purchased at a cost of \$75.00.

The major repairs of the house include such items as varnishing and refinishing the floors at a cost of \$126.00, rubber matting for the stairs about \$50.00; linoleum for toilets and east side coat room, \$67.00; a new cement walk at west side of house, \$39.50, and a bill for carpenter work of \$153.25 for fixing up and altering the basement and building several window screens. There were minor disbursements for cleaning rugs, repairing roof and eaves, cleaning chimneys and other small repairs and outlays that are always necessary and inevitable.

Next year the annual meeting of the American Medical Association takes place in Detroit and there are several things that should be done before our guests arrive. Your committee would recommend that the house be painted, some new rugs and curtains be purchased, tiling in the front hall be

repaired and the present ice box be repaired or a cooling system be installed.

Your committee cannot refrain at this time from mentioning more in detail concerning the ice box. As at present constructed the ice box certainly does eat up the ice. During the summer months the ice bills are about \$30.00 per month. Even in the winter the bills run about \$15.00 or \$16.00 per month. This is altogether too much. Your committee would emphatically recommend that an expert be consulted and find out if the present box can be made over, repaired, reconstructed at not too great expense or whether it would be cheaper to install a small cooling system. The present ice box with its thin walls opening directly into the kitchen, and surrounded by steam pipes is certainly a financial leak that should be calked.

The chairman of your committee takes great pleasure in thanking the Society for its forbearance and suggestions during the past year, also wishes to personally thank the other members of the committee, Doctors Ernest Lee, Warren Babcock, Frank Kelly and Carl Meloy for their valuable aid and suggestions during the past year, also to our efficient librarian and manager Miss White, much praise and thanks are due in carrying out the manifold duties of the house committee in so able a manner.

Respectfully submitted,

House Committee, W. H. Morley, Chairman.

#### IN MEMORIAM—WAYNE COUNTY MEDICAL SOCIETY REGULAR MEETING, SEPTEMBER, 20, 1915.

*Whereas*, Death has removed from our midst our esteemed associate Dr. Florence Huson, be it

*Resolved*, That we extend our deep sympathy to the family of the deceased, and be it

*Resolved*, That in her death the Wayne County Medical Society loses a faithful and loyal member, and be it

*Resolved*, That copies of these resolutions be recorded in the records of the Society and published in the weekly Bulletin of the Wayne County Medical Society.

Delos L. Parker, M.D.

M. V. Meddaugh, M.D.

William R. Chittick, M.D.

Committee.

Dr. Florence Huson, a member of this Society, died at her home in this city August 12, 1915. Death resulted from a stroke of paralysis. Dr. Huson was 58 years old at the time of death. She received instruction at the Ann Arbor High School, and was graduated from the Medical Department of the University of Michigan in 1885. From the university she came to Detroit to open a private hospital for Dr. Donald Maclean. Some years later she entered upon the private practice of medicine here and con-

tinued in this line of work up to the time of her death. Early in her medical career Dr. Huson became identified with several charitable and other important undertakings. She was an early member and an ex-president of the Blackwell Society. She organized and was the first president of the Free Dispensary for Women and Children. She was a member of the American Medical Association and an ex-president of the Michigan State Medical Society; a director of the Young Woman's Christian Association; of the Young Woman's Home and of the Priscilla Inn. She was one of the moving spirits of the College Club. For many years she was a member of the staff of the Woman's Hospital. She was widely known and universally respected as a superior woman, and many organizations devoted to the improvement of social conditions looked to her for advice. Her death is a distinct loss to the city as a whole.

Dr. Huson was a large hearted woman with an unusual equipment of knowledge and sense, who did much good in the world. Her philanthropies were unobtrusive, but many, and the bulk of her considerable estate was left to charity.

REPORT OF COMMITTEE ON NECROLOGY.

September 20, 1915.

Your committee, a year ago, reported the death of Dr. E. B. Smith, August 12, 1914.

Since then Dr. Joseph Shellfish, Mr. F. E. Moulder, associate member, September, 1914, Dr. E. A. Chapoton, February 6, 1915, have left us for the great beyond. Of Dr. Huson your present committee on Necrology will speak.

The year past, therefore, has happily not greatly encroached upon our ranks by death of members.

Respectfully submitted,

Charles W. Hitchcock,  
Chairman Committee of Necrology.

REPORT OF COMMITTEE ON NURSES.

The Committee on Nurses of the Wayne County Medical Society has the honor to report that the purpose for which the Central Nurses' Directory was established by the placing of the directory under competent central management and under our own roof has been fully realized by its increasing worth to its own membership, to the physicians of the county and the community at large. From a small beginning it has grown by degrees through the hard work of its officers and members until now with its union last December with the Wayne County Nurses' Association, its membership numbers some 500, with fifteen practical non-graduate nurses and eight male nurses.

The graduate nurse of the larger hospitals of the city naturally forms the greater part of its mem-

bership, but the graduate nurse of the hospitals of other cities early seeks admission, when entering into practice here. The Wayne County Nurses' Association Directory is to the nurse what the Wayne County Medical Society is to the physician, a badge of recognition of usefulness to the community.

With experience, efficiency of management has proved and we cannot commend too highly its usefulness, yea its necessity to us and the Committee desires to express herewith its appreciation to the officers of the Nurses' Association Directory for their untiring efforts to place every facility before the physician.

Some idea of the demands made upon the Association may be gleaned from a perusal of its report for the month of June, July and August of this year:

Calls supplied .....	982
Calls made but not supplied .....	27
Calls canceled .....	20
Calls for the practical nurse .....	29

Total ..... 1058

The trained nurse has become a necessity not only to the hospital but more and more so to the home. As the field of the physician is gradually enlarging to embrace the community's interest in the prevention of disease, the work of the trained nurse has been found even more closely interwoven with his. Their work is in common, their ideals are identical: service to humanity. So may the members of the Medical Society collectively and individually offer in the future as in the past to the Nurses' Association within our midst every encouragement to the continuance of its goods work by hearty co-operation.

Andrew P. Biddle, Chairman.

REPORT OF PUBLICATION COMMITTEE.

To the President Wayne County Medical Society:

Dear Sir: The Publication Committee respectfully submits the following report:

The weekly was published throughout the current year.

The income from Sept. 1, 1914, to Sept 1,

1915 was .....\$1,630.04

The debit for the same period was ..... 1,319.16

Net income for weekly .....\$ 310.88

Still on books .....\$ 106.00

A circular containing the revised constitution and by-laws, together with a history of the Society and names of the members to September 1, 1915, is now in the printer's hands and will be in the mail within a few days.

(Signed)

Alpheus F. Jennings, Editor.

R. C. Hull, Business Manager.

James Cleland, Jr., Program Com.



## REPORT OF LIBRARY COMMITTEE.

I herewith submit the report of your Library Committee for the current year of 1914 and 1915.

No. 1. Number of bound volumes in library, 14,621. Of these, 4,700 are duplicates.

No. 2. Number of current journals on file, 90.

No. 3. Amount of money spent for books and journals has been \$232.80. One hundred twenty-four journal files are now being bound and these will cost approximately \$125. Already \$35 have been spent for binding.

Through the courtesy of Mr. Adam Strohm, of the Detroit Public Library, the library is again the recipient of books valued at \$300.00.

For books and journals we are indebted to the following:

Florence Huson, H. W. Yates, Max Ballin, E. B. Smith, A. D. Holmes, J. H. Carstens, Harold Wilson, C. W. Hitchcock, F. C. Kinder, H. M. Rich, A. D. Aaron, W. P. Manton, M. Beumosche, Neurological Society, Ophthalmological Society, Atolaryngological Society, W. H. Morley, American Medical Association, H. R. Varney, R. C. Jamieson, F. W. Robbins, G. E. Fay, W. J. Wilson, Jr., L. J. Hirschman, E. M. Houghton.

The Library is rapidly increasing in size and the increased demands will require the entire time of the librarian. Cataloguing of the library is necessary and this will require at least a year's time. The Committee, mindful of the fact that the Society is under heavy expense, nevertheless recommends that the board of trustees secure the services of an expert cataloguer at the earliest possible moment.

Signed on behalf of the Committee,

Ernest K. Cullen, Chairman.

## REPORT OF PROGRAM COMMITTEE.

I herewith transmit to you my report as chairman of the Program Committee for the season of 1914-15.

We have had all of our dates filled and the meetings have been well attended and enthusiastic.

During the season past we have had twenty general meetings; one special; eight surgical meetings; eight medical meetings.

The number of papers read before the Society was fifty-seven. The number of guests from out of town reading papers was twenty.

The only recommendation we would suggest for the good of the Society is this:

That the council consider the advisability of providing a fund to be used by the committee in bringing men from out of town.

Some of our invitations to men outside were turned down because they could not see their way to pay their expenses. If we could say to them, your

traveling expenses will be paid by the Society, I am sure we would get some extra good material. In some cities I learn that traveling expenses are paid by the Society.

A large majority of the invited guests, however, would rather pay their own expenses, so that the expenses of the Society would probably be small.

The expense of the Committee for the season amounts to \$1.95 as per bill enclosed.

Respectfully submitted,

James Cleland, Jr., Chairman.

## REPORT OF THE ENTERTAINMENT COMMITTEE.

I beg to submit the following report of what was done by the Entertainment Committee for the season of 1914-15:

On November 24, 1914 a very successful and entertaining smoker was given at the Medical Building, and on the evening of April 27, a travelogue was given at the same place, which was not so much of a success. The smoker was a money making effort and the sum of \$258.10 was taken in; the travelogue was a free entertainment, with free refreshments and cigars.

Below is a summary of receipts and disbursements for the smoker:

Cash received .....	\$258.10
Cash paid out .....	144.32
Balance .....	\$113.78

Respectfully submitted,

C. L. Chambers.

Chairman Entertainment Committee.

Meeting October 4, 1915.

Mortality as Revealed by Life Insurance Statistics.

Dr. Frank T. F. Stephenson.

Discussion by Drs. Herbert M. Rich, J. H. Carstens.

N. B.—Meetings of the Surgical Section, which take place on the fourth Monday of each month, will be called promptly at 8:30 p. m.

## SECRETARY'S REPORT, 1914-1915.

The year of 1914-1915 has been a most successful one in the history of the Wayne County Medical Society.

Our membership has increased from 634 active and seventy-four associate to 673 active and seventy-two associate, a total membership of 745. Of this number, however, I regret to add that forty-eight are still in arrears for 1915.

While the proportion of our membership attending the weekly meetings is not large, our meetings have usually been well attended, the average being 120.

The policy of the program committee in having

many of the programs filled by out of town guests has undoubtedly added to the interest in the meetings, though to our own members as well are our thanks due for many valuable evenings.

We have held twenty-one meetings of the Society and eight meetings each of the Medical and Surgical sections.

One of the most important steps which we have taken this year was the establishment of the Business Bureau. The Chairman of the Board of Control will later in the evening report to us the present condition of that organization. Its success is a cause of just pride to those who have worked hard to establish it.

From the experience of the past year I make this recommendation to the Society:

That the chair appoint a committee on Irregular Medical Practice, this committee to investigate any charges of unethical action on the part of any member and to be the Society's representative in any action against irregular practitioners in our community.

As the organization of the medical profession of Wayne County we are the standard bearers and can not escape the responsibility not only for keeping ourselves clean, but for protecting the public from unscrupulous men outside our ranks.

The council has spent many hours listening to accusations against various Detroit doctors, not formally preferred charges, but accusations which we felt should be looked into.

This has hampered the regular work of the council. A committee to perform this work would be of decided value.

At the risk of anticipating our president I wish to impress upon every member that the year we are now beginning is an opportune year for our Society. The A. M. A. will hold its next meeting here in June, to which will come men of national and international reputation. Surely every Detroit physician will want to attend its meetings. Membership in the national organization depends on membership in the County Society. Get your neighbor and friend to join the Wayne County Society, and get him *now*.

C. E. Simpson, Secretary.

#### A COMMITTEE ON CANCER.

#### Wayne County Medical Society.

The last Government Bulletin, No. 112, Mortality Statistics, shows that cancer increased 25 per cent. during the decennial period 1901-1911. While this increase may not be absolute, it is well known that cancer is alarmingly prevalent and is one of the most fatal of disorders.

As cancer is a local development and, if taken

in time, is quite amenable to cure, it is incumbent upon the profession to exert the most energetic efforts toward its prevention and cure, and to instruct the laity by publicity and personal warning in regard to those conditions which it is supposed may lead to its genesis. It is therefore moved that a perpetual committee be appointed by the president of the Wayne County Medical Society, said committee to consist of three members, whose duty it shall be to continually bring to the attention of physicians the necessity of prophylaxis and the early recognition of cancer, and the inauguration of prompt and energetic treatment, further to instruct the laity through appropriate lectures and articles in medical journals and the public press, in the early signs of symptoms and dangers of this grave disease.

The committee first appointed shall serve for three, two and one years respectively, a new member being appointed each year at the annual meeting of the Society, or immediately thereafter, by the newly elected president, who shall also have power to fill vacancies. The following committee was appointed:

Dr. Walter P. Manton for one year.

Dr. Jas. D. Matthews for two years.

Dr. Jos. H. Andries for three years.

#### SALVARSAN.

*Whereas*, according to the statement of the Farbwerke-Hoechst Company, distributors for this country, the stock of salvarsan and neo-salvarsan is entirely exhausted; and

*Whereas*, its use in the successful treatment of syphilitic affections has become an absolute necessity; and

*Whereas*, syphilis is a communicable disease and very dangerous to the public health and from which thousands are innocent sufferers; therefore be it

*Resolved* by the Wayne County Medical Society that a committee of two be appointed by the president to address the State Department at Washington with the request that the British and French Governments be asked *on humanitarian grounds* so to modify the British "Order of Council" as to permit the shipments of these goods now held in Rotterdam; and further

*Resolved*, that the various State Boards of Health and influential medical societies throughout the land be requested to join in this appeal to the State Department.

The president appointed as members of this committee:

Dr. A. P. Biddle.

Dr. R. A. C. Wollenberg.

### MONTCALM COUNTY

The annual meeting of the Montcalm County Medical Society was held in the City Hall, Greenville, Mich. on the evening of Oct. 14, 1915. There were about twenty present at the meeting and listened to a very interesting paper on "Neuroses of the Heart" presented by Dr. Eugene Boise, of Grand Rapids. This was followed by the subject of Arteriosclerosis presented by Dr. F. J. Fralick, of Greenville, Mich., and a report of a case by Dr. H. N. Flexnor, of Lakeview, Mich. The following officers were elected:

President—Dr. M. E. Danforth, Stanton.

Vice President—Dr. F. A. Johnson, Greenville.

Secretary-Treasurer—Dr. F. J. Fralick, Greenville.

After which a luncheon was served by the Greenville city physicians.

F. J. FRALICK, Secretary.

### Book Reviews

A TEXT BOOK OF CHEMISTRY AND CHEMICAL URENALYSIS FOR NURSES. By Harold L. Amoss, S.B., S.M., M.D., Dr. P. H., formerly Chemist, Hygiene Laboratory, U. S. Public Health Service; Physiological Chemist, U. S. Bureau of Chemistry; Instructor in Physiological Chemistry, George Washington University Medical School; Assistant in Preventive Medicine, Harvard Medical School. 12mo, 268 pages. Cloth, \$1.50, net. Lea & Febiger, Publishers. Philadelphia and New York, 1915.

The outstanding characteristics of this volume are its clear diction, extremely lucid explanation and definition and the consistent emphasis placed on those aspects and bearings of chemical science, a knowledge of which is certain to be of practical advantage to the nurse.

Dr. Amoss has made a careful but very concise survey of the whole subject, making clear the terminology of the science, afforded definitions of unusual lucidity and selected for more detailed consideration those points, an understanding of which must increase the capacity of the nurse for intelligent service. To this end stress is laid on the chemistry of foods, of metabolism and of digestion, and on uranalysis and allied subjects. A clear grasp of the requirements of the nurse has enabled him to avoid the two extremes of superficially and of too minute attention to detail and the more complicated aspects of his subject. Technical terms are elucidated and laboratory procedures explained. A useful feature is a brief and most enlightening summary, at the end of each chapter, of the information the author has endeavored to impart. The nurse who devotes serious attention to this volume will have an intelligent working knowledge of general chemistry and a useful, well grounded, understanding of the science as it bears on her work.

A TEXT BOOK OF SURGERY FOR STUDENTS AND PRACTITIONERS. By George Emerson Brewer, A.M., M.D., Professor of Surgery, College of Physicians and Surgeons, New York; Surgical Director, Presbyterian Hospital; Consulting Surgeon, Roosevelt Hospital, assisted by Adrian V. S. Lambert, M.D., Associate Professor of Surgery, Columbia University; Attending Surgeon, Presbyterian Hospital; and by members of the surgical teaching staff of Columbia University. Third edition, thoroughly revised and rewritten. Octavo, 1027 pages, with 500 engravings and 23 plates in colors and monochrome. Cloth, net, \$5.50. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

The thoroughness of the latest revision has added to the practical usefulness of a work which will be accorded general recognition as a complete presentation of modern surgery and a text of unusual lucidity.

The author is qualified to speak with authority and not less qualified from his teaching experience to present a difficult subject in the form best calculated to enlighten the student and sustain his interest. The new third edition stands as an authoritative presentation of advanced thought and approved practice in surgery. Prof. Brewer has succeeded in treating fully all essential aspects of surgery in a one-volume text book which should lighten the burden of the student, and should be equally useful as a reference work for the surgeon or a guide to the practitioner who aims to keep in touch with the best practice.

The recent advances in surgery have been so great that it has been necessary to largely rewrite this work. The author has secured from members of the teaching staff of Columbia University, who have been in intimate touch with the progress in these fields, chapters dealing with some of the most notable recent advances. This results in adequate and appreciative treatment, and at the same time increases the authority of the work and its didactic quality.

The chapters dealing with Hernia, Infections of the Hand, Cellulitis, Spinal Cord, Nerves, Head, Bone Infection and Shock, in particular, give evidence of the careful revision and the thoroughly modern viewpoint adopted. The size of the volume has been substantially increased. The illustrations, many of which are from photographs in the surgical laboratory of the Presbyterian Hospital and from Lumiere photographs of clinical conditions, are so selected as to assist greatly in the mastery of the text.

CANCER: ITS STUDY AND PREVENTION. By Howard Canning Taylor, M.D., Gynecologist to the Roosevelt Hospital, New York; Professor of Clinical Gynecology, Columbia University; Member American Society for the Control of Cancer, etc. 12mo, 330 pages, Cloth, \$2.50 net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

The author in this work has presented the results of a careful study of the cancer problem in all its aspects. He has made a careful analytical examination of the literature, and subjected the conclusions



therein contained to comparison with the results of his own extensive observations in hospital and general practice. The data derived from official reports have also been carefully weighed and scrutinized. The material thus obtained has been coordinated, discussed and put in a form which makes it immediately useful to the practitioner or special student of the subject.

In the final analysis Dr. Taylor's work is a clear, condensed and complete presentation of present knowledge in regard to cancer. He views the subject in its broader aspects, and offers much information which is not only of immediate value to the physician, but available for dissemination by him among the laity in the hope of reducing the cancer death rate by creating a more intelligent understanding of the causes of cancer; the means by which the individual may lessen his liability to attack, and the possibility of complete cure as the result of early operative treatment.

Every item of available information which sheds light on the causes of cancer or indicates measures for its prevention is presented logically and in complete detail. Emphasis is laid on diagnosis and on the importance of the early recognition of the disease. To further this the earlier symptoms are enumerated at length in the consideration of each type of sarcoma and carcinoma. Pathology and Etiology are given extensive consideration as is the treatment of inoperable cases. The full statistical information is so arranged by the author as to afford the largest measure of assistance to the practitioner who will find this volume a concise and at the same time complete guide in his handling of these cases.

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DISEASES OF THE NERVOUS SYSTEM: A TEXT-BOOK OF NEUROLOGY AND PSYCHIATRY. By Smith Ely Jelliffe, M.D., Ph.D., Adjunct Professor of Diseases of the Mind and Nervous System, New York Post-Graduate Medical School and Hospital, and William A. White, M.D., Superintendent of the Government Hospital for the Insane, Washington, D. C.; Professor of Nervous and Mental Diseases, Georgetown University; Professor of Mental Diseases, George Washington University, and Lecturer on Psychiatry, U. S. Army and U. S. Navy Medical Schools. Octavo, 796 pages, with 331 engravings and 11 plates. Cloth, \$6.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

In this text-book the authors have described the diseases of the nervous system in the order of its evolutionary development, beginning with those biophysical and biochemical syndromes which are indicative of disturbances at the phylogenetically lowest, the vegetative level of the nervous system. They have taken up the disorders more closely confined within the sensori-motor systems, and have concluded by the discussion of those diseases which more clearly involve the psychical processes. Thus the reader passes in orderly progression from the

purely biophysical levels of unconscious automatic activities to the highest psychical levels of conscious social adjustment, which is the distinctive characteristic of man. It has been difficult to group all diseases of the nervous system strictly by means of this scheme, chiefly because many of them, if not all, spread over the borders of one level to other levels. The general advantages of such an arrangement, however, are great, and permit of an orderly perspective of the functions and disorders of the nervous system. Such a comprehensive plan for a text-book on nervous diseases is here attempted for the first time.

A distinctive feature of this work lies in the fact that the authors have tried to make it a connected story from cover to cover, embracing the whole realm of nervous diseases—not two books—one on neurology and one on psychiatry, merely compassed by one binding. To this end the various elements of a given problem are brought together and treated consecutively; as for example the syphilitic, the arteriosclerotic and the toxic syndromes. These problems present themselves in this way in practice, and any independent and disconnected consideration of these elements tends to further an erroneous belief in the separateness and autonomy of the different reacting levels, which are in reality so closely connected as to be virtually one. Such an arrangement prevents a comprehensive grasp of the meaning of disorders of the nervous system that this work aims to convey.

In recent years great advances have taken place in knowledge relative to the two extremes of the nervous system, the vegetative and the psychical. The new facts gathered relative to the internal secretions and of their effects, acting through the medium of the vegetative nervous system, has given us our most comprehensive idea of the relationship between these two great groups of reactions so long considered under the unsatisfactory titles of the functional and organic. Therefore, in order to attain clearness and unity of treatment, the authors have expressed reactions either in physicochemical or in psychological terms, as seemed best. If their efforts have been successful, the descriptions of well known diseases should gain a new vitality and make a deeper impression on the memory.

Throughout the work the authors have aimed at practically, and have endeavored to avoid limiting hypotheses, in the belief that it is safer to adhere to the objective findings. Nevertheless they have not been entirely satisfied with descriptions, but have aimed at interpretations. They have tried to avoid the analysis of the meaning of words in order to understand the actions of things, and have not hesitated, therefore, to formulate certain interpreta-

tions in psychological terms, without actually committing themselves to philosophical theories or even to a restricted philosophical position. The criterion has been reviewing of facts as observed in the writers' own personal experience.

**POTTERS COMPEND OF ANATOMY.** Revised by D. Gregg Metheny, Associate in Anatomy, Jefferson Medical College, Philadelphia, Eighth Edition, 139 illustrations, numerous tables, 428 pp. Cloth, price \$1.00 net. P. Blakeston's Son & Co., Philadelphia.

The revision has improved this standard compend. The compend has always secured our approval and admiration and this edition merits its continuation. The volume is one that is of value to student and practitioner alike.

### Miscellany

**Filudine.**—This is a French proprietary sold in this country by Geo. J. Wallau, Inc., New York. It is offered as a remedy for "biliary insufficiency," "hepatic insufficiency," "intestinal dyspepsia," "all effections of the liver (diabetes, cirrhoses, cancer, etc.)," "malaria," "obesity" and "tuberculosis." The statements in regard to the composition of filudine are unsatisfactory and even contradictory. The Council on Pharmacy and Chemistry reports that filudine is a mixture of semi-secret composition; that the therapeutic claims are manifestly unwarranted. The name is not indicative of the composition, whatever that may be, and no rational excuse is offered for the combination of liver and spleen extracts (with or without bile extracts) with "thio-methyl arsinate" or "thio-cinnamate" of caffeine (*Jour. A.M.A.*, Sept. 18, 1915, p. 1045).

**Globeol.**—Globeol is sold by Geo. J. Wallau, Inc., along with Urodonal, Jubol and Filudine. The Council on Pharmacy and Chemistry reports that when the description offered by Wallau is divested of obscuring verbiage, globeol appears to be evaporated horse blood mixed with small quantities of colloid (dialyzed?) iron and manganese and a "dash" of quassia. The Council declared globeol ineligible for New and Nonofficial Remedies because its composition is semisecret; because unwarranted therapeutic claims are made for it and because the asserted combination is irrational (*Jour. A.M.A.*, Sept. 18, 1915, p. 1046).

**Verlie Gatlin Wrinkle Remover.**—The Verlie Gatlin Beauty and Wrinkle Treatment was a Denver mail order concern which promised to remove facial blemishes of all sorts and in other ways to make its customers (dupes) beautiful. A

post office fraud order has been issued against the promoters of this medical fake (*Jour. A.M.A.*, Sept. 18, 1915, p. 1047).

**The Horowitz-Beebe Cancer Cure.**—Dr. J. W. Vaughan, Detroit, Mich., protests against the unauthorized use of his name in connection with the Horowitz-Beebe cancer cure, autolysin. A private letter written one week after beginning trials with the cure of Dr. Beveridge was made to do service as a testimonial in a lay magazine (*Jour. A.M.A.*, Sept. 18, 1915, p. 1048).

**Strychnine Not a Cardiac Tonic.**—As a result of investigations carried out in the Massachusetts General Hospital at Boston, Dr. L. H. Newburgh concludes that there is no pharmacologic or clinical evidence which justifies the use of strychnine in the treatment of acute or chronic heart failure (*Jour. A.M.A.*, Sept. 18, 1915, p. 1032).

**Grant's Epilepsy Cure.**—Fred E. Grant, Kansas City, Mo., sells an "epilepsy cure" on the mail order plan. Analysis in the A.M.A. Chemical Laboratory demonstrated it to be a bromide mixture containing as its essential ingredients about 15.8 gm. potassium bromid and 0.9 gm. sodium bromid per 100 c.c. (*Jour. A.M.A.*, Sept. 4, 1915, p. 894).

**Micajah's Uterine Wafers and Piso's Tablets.**—The A.M.A. Chemical Laboratory has determined that Micajah's Uterine Wafers and Piso's Tablets are practically identical—a mixture of dried lum, borax and boric acid. While Micajah's Uterine Wafers are advertised to the medical profession, Piso's Tablets are a "patent medicine." The claims made to the public for Piso's Tablets are silly and mischievous, but no more so than those made to the medical profession for Micajah's Uterine Wafers (*Jour. A.M.A.*, Sept. 25, 1915, p. 1128).

**Episan (Brober).**—The Council on Pharmacy and Chemistry finds Episan, recently renamed Brober, ineligible for New and Nonofficial Remedies. Neither name indicates the active ingredients—potassium bromid, 44.3 per cent., borax 41.2 per cent., zinc oxid, 3.68 per cent. and amyl valerate 4 per cent. A physician prescribing the preparation under either name would not realize that he was administering borax, and therefore would not take the precaution to watch the intestines and the kidneys. Also, he would not realize that the treatment was essentially a bromid treatment. There is no evidence to show that borax is harmless, as claimed, or that either borax or zinc oxid is a nerve sedative (*Jour. A.M.A.*, Sept. 25, 1915, p. 1130).